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THE

AMERICAN FARMER:

A

MONTHLY MAGAZINE

OF

AGRICULTURE AND HORTICULTURE.

N. B. WORTHINGTON, EDITOR.

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AMERICAN FARMER:

DEVOTED TO

Agriculture, Horticulture and Rural Economy.

[ESTABLISHED 1819.]

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." . . . . . *Virg.*

Fifth Series. BALTIMORE, SEPTEMBER, 1861. Vol. III.—No. 3.

SEPTEMBER.

"Hence from the busy, joy-resounding fields,
In cheerful error, let us tread the maize
Of Autumn, unconfined; and taste, revived,
The breath of Orchard big with bending fruit;
Obedient to the breeze and beating ray,
From the deep loaded bough a mellow shower
Incessant melts away."

WORK ON THE FARM.

TOBACCO.

With the Tobacco grower this is an important month. The cultivation of the soil will generally have ceased except for very late plantings. Topping, suckering, worming and housing will in turn demand attention, until the crop is secured. If the worms are in any force, there is no resource but catching and killing them. If the Tobacco is taken to the house with worms on it, they will continue their work there, unless fire is used to dislodge them. The suckers should all be broken out immediately preceding the housing, else they will continue to grow. The young planter will require the advice of a judicious neighbour, as to the ripeness of his crop. The ripe leaves assume a peculiar spotted appearance, which he will soon learn to recognize. In order to have the plants ripen with uniformity, the tops should be broken back to the same length of leaf, and usually about three weeks before cutting. The whole crop, large and small, should be topped by the 20th of the month. In housing see that the plants are not crowded upon the sticks, nor the sticks too closely jammed together. They should have ample room to avoid the plants touching when the leaves have wilted. We should expect to have the whole crop secured in this latitude by the 10th of October.

THE CORN FIELD.

Any portion of the Corn field that you intend to seed in Wheat, should be cleared by cutting at the ground, as early as the condition of the Corn will admit of it. The Corn blades, well secured, make the best long food for horses, and though it is generally supposed the crop of Corn is diminished by taking them off, there is undoubtedly some degree of compensation in so valuable a provision for your working stock. They are especially valuable for riding and carriage horses. They should be gathered as they begin to turn yellow, and housed with as little exposure as possible to bad weather.

PREPARATION FOR WHEAT SEEDING.

The preparation for seeding will now consist in the completion of the fallowing, if not done, and harrowing and rolling, as well to make a solid bed for the Wheat as to get it into perfect condition. Such preparation causes the Wheat to start quickly, and make a vigorous growth in the fall—a point of chief importance. Corn land, to be sown in Wheat, will require no preparation but cleaning off the corn, unless it be to get rid of a large growth of "crab-grass." This may be done by running the harrow in one direction and then back in the same track. The Wheat may then be sown with the drill, and this will prove a better preparation than any ploughing you might give it.

PREPARATION OF SEED.

Seed should be prepared by washing and soaking in strong brine for some hours, and drying with quick-lime, or a coating of guano, unless you mean to use guano in the drill. Avoid, however, unclean seed. As to smut, there is much doubt whether any process known will so

cleanse the Seed as to ensure the crop against it. We would not, therefore, if possible to avoid it, use any grain in which it may be found.

TIME OF SEEDING.

A great dread of the Hessian fly postpones our Wheat seeding usually to too late a period. This enemy is greatly to be feared, it is true, but it is only occasionally it becomes very destructive, while the evils attendant on late seeding are almost universally present. For want of an ample supply of strong roots, the crop is liable to freeze out, to be destroyed by rust, to be consumed by midge, and escaping all these, is short, any how, of the capacity of the soil. A full crop of grain is dependent on the growth of root formed in the fall. Those who, fearing fly, will not sow in September, should use the utmost diligence to be in readiness to put their whole crop in the ground by the middle of October.

MANURING.

Whatever may be your preference among the commercial fertilizers, we should use not less than seventy-five to a hundred pounds of Peruvian guano to the acre, put in with the drill. This may be applied in the form of manipulated guano, or in combination with super-phosphate, or fine ground bone, or with some fine compost, or slacked ashes passed through the guano seive. If you have home-made manures to be put on the surface after seeding, whether in fall or winter, we should regulate the quantity used in the drill by that, but it is advisable always, however much manure you use or however rich the soil, to give a small supply of guano immediately in the way of the forming roots, and especially if the time of seeding be not very early.

RYE.

Rye should be now sown without delay. We commend it especially to those who want early green food in spring two weeks in advance of clover. A small lot for cutting will give a good supply for horses, milch cows, &c. If sown for this purpose, two bushels of seed per acre is not too much—for a crop one bushel is sufficient. If clover seed be now sown with what you intend to cut green, it will make a crop fit to cut in June, with the second growth of Rye. It is a very good crop to sow timothy with.

TIMOTHY.

Timothy may be sown on any fall grain as late as 20th of October. It is sometimes sown in spring, but fall sowing is preferred. A gallon of good seed, well distributed, is sufficient for an acre.

TURNIPS, CABBAGES, ETC.

Keep Turnips, Cabbages, and other late crops, worked as they may need it.

THE VEGETABLE GARDEN.

Celery.—Keep Celery clear of weeds, and earth up as the plants advance.

Spinach, &c.—Keep all growing crops of Spinage, and other greens, properly worked, and sow succession crops.

Cabbages.—Sow seeds of Early Yorks and other early sorts, if you want them, to be planted out in October for spring and summer use.

Radish.—Seeds may still be sown for fall use.

Turnips.—Keep this crop in growing order, and if you have not a sufficient supply, sow some seeds on well prepared ground.

Cauliflower.—If you mean to have a crop of this fine vegetable, sow seeds during the month in a rich bed.

Lettuce.—Set out Lettuce plants, if large enough, in a warm, quick border, well prepared. Sow seeds of hardy sorts, to be set in warm borders or in cold frames, for spring use.

Kale.—Sow seeds of Siberian Kale in a rich border, well manured.

Seeds.—Gather and put up seeds as they ripen, and be sure to label with care, and keep them from mice.

Flower Garden and Green House.

Roses—such as are growing in the open ground, and intended for blooming in the greenhouse during the winter, should, towards the end of the month, be taken up and potted, after which, place them in a shady situation for a few days. Continue to put in cuttings, and as the weather begins to get cooler, the success in getting more of them to take root will be evident.

Dahlias—these will be in full bloom towards the end of the month—give water freely at the roots should dry weather set in; occasionally look over the whole, and cut off all suckers and superfluous branches, observing to keep the leading shoots tied up to the stakes; where large flowers are wanted the buds should be thinned out so soon as they show themselves.

Chrysanthemums—those in pots should now receive the last shift for the season; discontinue pinching back the shoots, as the flower buds will soon be making their appearance; about the latter end of the month, all such plants as are wanted from the open ground may be lifted and potted; continue to water freely at the roots with liquid manure.

Tender Annuals—for winter blooming, sown last month, should be potted off singly, or pricked out into pans or boxes, to stand there for a week or two longer before potting.

Camellias—continue to syringe the old plants freely over-head, until cold weather sets in, when they should be removed into the greenhouse. Continue also to put in cuttings; such as are rooted should be potted off and placed in a frame that is well shaded.

Greenhouse plants in general—if not already shifted or top-dressed, should not fail to have attention paid to them during the course of the month, as by so doing, much labor and time will be saved when they come to be housed next month, and the plants will stand better during the winter than when shifted later in the season.

Sparaxis and Ixias—with other cape bulbs of the same character, may now be potted, and water given but very sparingly for the first few weeks.

Japan Lillies—as the leaves begin to appear yellow from age, will require but little water.

Pelargoniums—Cuttings of these put in last month will now be rooted, and should be potted off, and such as were struck in two inch pots may now be shifted into larger ones. See that the old plants do not suffer from too much wet by heavy rains.

Double Neapolitan Violets—can now be safely planted out in beds where they can be protected by a sashed frame during the winter, and by a little care in airing and watering they will flower beautifully next spring.

Pæonias—may be divided and transplanted this month.

Hardy Herbaceous—plants of all kinds can now be transplanted with safety; they will take root before the cold weather sets in.

Phloxes—of various kinds can now be increased readily by cuttings of the young shoots put in sand and placed in a moist shady situation.

Scarlet Geraniums, Heliotropes, Cestrums an Habrothamnuses—growing in open borders, should be lifted and placed in pots about the latter end of the month.

Carnations—take up and pot such layers as are rotted, place them in a frame and water but very sparingly.

Verbenas, Petunias and Heliotropes—put in cuttings of these to make young plants for next spring.

Chinese Primroses—keep shifting the small plants of these into larger pots. Six inch pots are a large enough size in which to bloom them well.

THE FRUIT GARDEN.

Gather Apples and Pears as they approach maturity. Both fruits are better if taken from the tree before they are fully ripe. Let them be pulled when the trees and fruit are quite dry, and handled with care to avoid bruising. Pears should be put away on shelves. Apples should be put in heaps, in a dry room, for ten days or two weeks, before being barrelled. They should then be wiped with a dry cloth, one by one, and put into barrels.

Planting.—Put ground in preparation for planting, by deep and thorough ploughing and manuring.

Strawberry beds may now be planted out.

The Action of Salt and Saltpetre on Meat.

The following interesting account of the action of salt and saltpetre on meat will doubtless be new to many of our readers:

The manner in which *salt* operates in its preservative functions is obvious. Salt, by its strong affinity, in the first place, extracts the juices from the substance of meat in sufficient quantity to form a saturated solution with the water contained in the juice, and the meat then absorbs the saturated brine in the place of the juice extracted by the salt in the first place. Thus, matter incapable of putrefaction takes the place of that portion of the meat which is most perishable. Such, however, is not the only office of salt as a means of preserving meat: it also acts by its astringency in contracting the fibres of the muscles, and so excludes the action of air on the interior of the substance of the meat. The last-mentioned operation of salt as an antiseptic is evinced by the diminution of the volume of meat to which it is applied.

The astringent action of *saltpetre* on meat is much greater than that of salt, and thereby renders the meat to which it is applied very hard; but in small quantities it considerably assists the antiseptic action of salt, and it also prevents the destruction of the florid (or red) color of the meat by the application of salt. From the foregoing statement of the mode of operation of salt and saltpetre on meat, it will be perceived that the application of these matters deteriorates, in a considerable degree, the nutritive, and, to some extent, the wholesome qualities of meat; and, therefore, in their use, the quantity applied should be as small as possibly consistent with the perfect preservation of the meat.—*Farmer and Gardener.*

Breeding and Feeding Pigs.

The London *Farmer's Magazine* for June, contains a steel engraving of the small breed of "improved Cumberland and Yorkshire hogs," bred by Mr. Geo. Mangles, of Givendale, Ripon, Yorkshire. They are entirely white, and models of symmetry and beauty. Mr. Mangles furnishes a paper on the "Breeding and Feeding of Pigs," from which we make a few extracts:

"About ten years ago, I commenced pig-keeping on a larger scale than the generality of farmers. What I wanted, and what my farm required, was a quantity of good manure. I first tried buying stores in the neighborhood, but soon gave that up, as they were chiefly of the large breed, and required too much food and liberty. I had no alternative but to breed my own stores. With a view to find a profitable sort, I purchased a few of the best from different breeders of note, and kept them separate, and also a few stores of each sort together, living on the same kind of food. I also tried the different crosses; but to get the cross I must have pure stock at first; so I considered it best to keep to a pure breed. I tried the Essex, the black Leicesters, the Berkshire, the large Yorkshire, the small Yorkshire, and lastly the Cumberland small breed. I must confess that at the outset I had but little experience to guide me; not understanding the principles of breeding, I committed many foolish mistakes, which I paid dearly enough for; and if these few lines should meet the eye of any one wishful to form and keep a breed of pigs, I shall be glad for such a man to profit by the experience of another. I never expected pigs to live on nothing, because the manure made from pigs living on nothing would be worth nothing, and it was good manure I was aiming at. I found any breed pay, except the large breeds. All the crosses having the small breed for the sire always paid; whichever breed is intended to be kept, the best-bred ones should be obtained. I do not advocate breeding in-and-in, but I do advocate, if you want to maintain the same style of animal generation after generation, to cross with the same blood, but as far distant as you can get it. I do not know a better sign of pure breeding than a litter of pigs all alike, or three or four sisters breeding alike to the same boar. When the breed is obtained, one thing must always be kept in mind—the first boar a sow is put to influences the succeeding litters for three or four times.

"After the breeding come the feeding and attention. Milk and fat must go in at the mouth before it makes its appearance in the animal. I do not believe those who say their pigs get fat on nothing. I know from experience that one pig would live where another would starve, and what would take to make one large-bred pig fat, would make several several smaller-bred ones 'up.' A great help to profitable pig-keeping is warmth, and confinement, and regularity in feeding; as by also keeping the skin of the animal clean by washing and brushing occasionally. If two animals of the same litter be put into two different sties, and have the same quantity of food each, the one that is kept warm and with the skin clean will gain more weight than the other. I found that out one winter, when Jack Frost was astir, before I put up a new pig-shed. My man was feeding a lot of pigs alike, only some were in common sties and others in a warm shed. The difference was very striking; those kept warm fed nearly half as fast again as the others. This induced me to build a long covered shed sixty feet long and eighteen feet wide, that would hold seventy porkers or fifty bacon pigs, where, when the thermometer has been below freezing point outside, it has inside been very warm and comfortable. The pigs have their food warm in winter, and are never starved by the cold; they are bedded with clean straw every other day, and the shed is kept rather dark. The manure made is of first quality and fit to use for turnips.

"Perhaps some of the readers of this paper would like to know something about the dietary of my pigs. I have not included sugar in my list of feeding ingredients. I have never gone higher than new milk, which they always take without sweetening. In the first place, I must say that I exhibit at a few of the leading agricultural meetings, and am generally, if not at the top of the ladder, not many spokes off. I keep my breeding stock different to my show stock, as I do not like breeding animals to be over-fat; but show animals are obliged to be fat, or the judges will pass them over. The over-feeding of prize animals is a very great evil, but one that can not be very well remedied. A show of lean breeding animals would be a very lean show indeed in many respects; an exhibitor must always sacrifice some of his best animals to please the public fancy. I think there is less risk in fat breeding pigs than any other animal. I have had several very fat sows pig, and never lost any. I gave them nothing but a very little bran and water a week before pigging, and but little after for a week, while I put a little castor oil in their food directly after pigging. I have the greatest trouble in reducing the male animals, as they will nearly hunger to death before they will part with their fat. I generally turn them into a large yard,

and give them plenty of water and a wurzel or two every day, or turn them out to grass in summer.

"To my regular breeding pigs and stores I am giving boiled rape-cake and barley-meal, one feed a day, and one feed of raw potatoes or wurzel; and if in summer, I turn them to grass, or soil them with clover in the yards.

"I soil a good many every year. A week or two before the sow pigs I contrive to put her into a loose box, with a railing around to keep her from crushing the pigs. I can always tell when she is going to pig by trying if she has milk in the paps; if a sow gives milk freely she will pig any time. I then contrive to be, or have some one near at hand to take the pigs away as she pigs them, as the sows are sometimes uneasy and will crush them. After she has pigged, I feed her with warm water and bran, and then give her the pigs and leave them, because the less they are disturbed the better. I always feed the sow sparingly at first, as I have sometimes found, when a sow has been fed liberally at first, the flow of milk is greater than the pigs can take; consequently the ure becomes hard and the sow is very uneasy, and will scarcely let the pigs suck her. If such is the case, the best way is to rub the ure well with the hand three or four times a day. Small bred sows are commonly very quiet and tractable.

"Generally when the pigs are three weeks or a month old, they will scour if proper care has not been paid to the sow's feeding. I never could get a man that could get me a litter through without scouring. I have tried different plans, but the one I have found most successful is to always give the sow a tablespoonful of the following mixture in her food: Mix together 2 lbs. of fenugrek, 2 lbs. of aniseed, ½ lb. of gentain, 2 oz. carbonate of soda, and 2 lbs. of powdered chalk. The sow gets very fond of this, and the little pigs too, like it. Give the pigs also plenty of cinder ashes to root amongst. I prefer oats, wheat, and a little barley ground together, for sows giving milk. I have never tried the sugar diet, but I have found new milk fresh from the cow work wonders in a short time.

"Warmth, cleanliness, and regularity in feeding, a little good food and often, are the main secrets in rearing young pigs. I never like to see food left in a pig's trough; just give what they can eat up and no more. When pigs are put up to feed they should be kept warm and quiet. Five porkers or three bacon pigs are plenty together. The pen they are kept in need not be very large, but the pigs should be wrung, and a little fresh bedding spread about them every second day. Pigs like to be kept warm, but plenty of fresh air must be allowed to circulate through the pens, or else disease will soon show itself."

A Poor Man's Pleasant Home in the Country.

It is a prevalent notion that a pleasant country residence must necessarily cost a great deal of money. As we have walked with visitors through the tastefully planted grounds of a certain neighbor, it has often amused and vexed us to hear the remark made, with a long drawn and half envious sigh, "Well, *rich* people can have such fine places, but we common folks must go without them." While the truth has been, that in most cases these grumblers were richer than the envied proprietor; they were richer, but lazier. This fine place cost the owner skillful industry, continued for many years, but not much outlay of money.

It has been our pleasure to visit lately another residence, in a neighboring county, which is the admiration of all who see it, yet which cost but little money, and is the property of an intelligent hard-working mechanic. The pleasure it gave, and the good example it may afford to others, induce us to give a brief account of our visit.

On alighting at the gate of this gentleman's grounds, we were not struck by the grandeur of the house, or the pretensions of the gateway; by statues, vases, or ornamental structures of any sort. None of these things were to be seen. The house was an old one, renovated and slightly modernized, with a porch on one side and a piazza on the other, and a little bow-window for plants. The fence was a simple paling, made and painted by the owner's own hands. The lawn in front was not large, but it was indeed a lawn—smooth, closely shaven, and of the finest sort of grasses, and nothwithstanding the prevailing drought, quite green. The trees were well chosen specimens of their respective kinds, evergreens and deciduous, pleasantly intermingled. Mr. Brown, the proprietor, has a strong preference for native trees over foreign, and thinks it almost a test of one's patriotism to think as he does. He is very fond of raising trees from seed, and has a little nursery of all sorts of native seedlings, from which he transplants to different parts of his grounds as occasion requires.

One feature of Mr. Brown's planting attracted our particular attention, viz: his management of groups. Some were open and wide spreading, others as close and dense with undergrowth, as the wildest forest. Some were set on the out

skirts, with low-branching trees and shrubs and vines, and the foliage was so closely interlaced down to the very ground that the eye could not penetrate it at all. On the margins, were piled boulders and broken masses of rocks, over which wild shrubs and vines clambered, giving the whole a very picturesque air. Gravel walks wound among these groups, frequently leading into the centre of them, where were rustic seats, on which the family or visitor could sit and enjoy siestas, shielded from the sun and from all observation. This was the wildness and seclusion of the forest, in the midst of a highly dressed lawn, and within three rods of Mr. Brown's parlor.

The spaces between these groups were kept mowed, and here and there were circular beds of flowers. For instance, we noticed one bed of crimson petunias side by side with one of pure white. Adjoining these ornamental grounds, but concealed by hedges, were the kitchen and fruit gardens, in which vegetables and the smaller fruits were growing in a healthful and vigorous manner that showed good care.

Leaving this part of the premises, Mr. Brown conducted us along a carriage-road leading to a valley in the rear of his premises. Observing that this road was somewhat broken where it ran in a straight line, but smooth where it curved, Mr. Brown said he had noticed the same thing, and had ready an explanation of it. Where the road was straight, the hinder wheels of his wagons (which were often heavy loaded) followed exactly in the tracks of the forward, and thereby deepened the rut; but where the road curved, the different wheels ran over different portions of the ground, and therefore did not cut any part badly. So in road making, as in many other things, utility and beauty run in the same track.

Following this road, we were soon in the midst of a well-wooded valley, down which ran a stream broken by occasional rapids and waterfalls. At the foot of one of these falls, which was about twenty feet high, Mr. Brown had built one or two rude seats. From this point, we followed a path leading by a gentle ascent in various windings up the sides of a tree-covered hill, until we reached the top. This was not a gravel walk, but simply a wide wood path, laid out by our host himself, and easily kept in order. This hill proved to be a ridge with several distinct eminences. On each of them the underbrush had been cleared up, and comfortable rustic seats built out of the trees and grape-vines of the surrounding forest. And now came a series of pleasant surprises. From one of these peaks, a view had been cut out through the woods in a Southern direction, embracing a wide range of country, hills, valleys, streams, and scattered farm-houses. The landscape in every other direction was left purposely shut out from observation. After resting and enjoying ourselves awhile here, we followed the path down into the forest again, until ere long we turned and gained another summit. Here were home-made seats again, and another prospect, but in an entirely different direction. Before us in the distance, were two valleys converging, with their mill-streams, and factories, and villages. From this point, too, all other views were excluded. Off again, but in the direction of the valley, we followed our host's guidance among the trees, until we came upon a seat built close upon the brink of a precipice, from which all outward views were cut off by overhanging trees and wild vines, but from which on looking *downward*, almost under our feet, we saw the house and grounds of Mr. Brown the repose and beauty of which were in striking contrast with the wild spot in which we were sitting. Could anything have been more charming! After enjoying this nook awhile, and listening to the musical tinkle of the stream below, we took up our line of march down into the valley, and thence to the house, where a dinner refreshed us after our long ramble.

Now, we venture to say that there are few places within fifty miles so attractive as this. Yet it was not the property of a rich man. Nearly all these improvements were made by the owner's skillful hands, with only a trifling outlay of money. They were made from time to time, at odd hours, as a means of recreation from other and harrassing pursuits, and all within the past seven years. It is true, Mr. Brown had a valley and a hill to work up such as few possess; but then he had also a quick eye, and a ready hand, and a stout will, which seldom fail to accomplish great results anywhere. The fact is, most persons are *too lazy* to effect much; and they are glad of the chance to yawn their complaint: "O, if I were only *rich*, I could have a fine place!" What such men as Mr. Brown have done with limited means, and in so short a time, others may do, if they only possess a like enthusiastic love of rural pursuits, a willingness to sacrifice some other common gratifications, if need be, and perhaps to sweat a little, in order to secure a desirable object.—*American Agriculturist.*

☞ Who lets one sit on his shoulders shall have him presently sit on his head.

HOUSEKEEPERS' COLUMN.

GRAPE WINE.—Wine may be made from the Isabella grape on a small scale, by picking the fruit in clear, dry weather, when *perfectly ripe*, and after picking out all the immature and unsound berries, put them in a tight box or tub and mash them with a pestle or pounder, having the lower end square. Reduce the fruit in this manner to a fine mass, *but do not break the seeds* while pounding. The next process is the extraction of the juice, which may be done by placing the mass in a coarse bag or sack, and submit it to pressure. If a cheese or portable cider press is at hand, make use of it; otherwise place the bag between planks, and lay stones on them. When the juice ceases to run, remove the pomace to a tub, and after breaking the cheese fine, sprinkle on a quantity of clear, soft water, to dissolve and draw out the remaining juice. When all the juice is expressed—which is usually from 12 to 16 quarts per bushel of grapes—to each quart of the juice add half a pound of white granulated sugar, stirring and shaking it until the sugar is completely dissolved. Put the liquor into a cask, (clean of course,) which should be full, in order that the impurities may flow over by fermentation at the bung. Some of the liquor should be reserved in a pitcher or bottle, to fill up as often as it sinks below the bung. After it ferments eight or ten days, put in the bung tight, and let it rest in a cool, dry cellar; there to remain until March, when it should be racked off into a clean cask, well sweetened with a brimstone match burned within. As it undergoes several changes the first year, it is well to let it remain in that state until late in the fall, when it should be again racked off into a cask, and if it is not fine and bright, it would be well to fine it with sweet milk, or with the whites of eggs beat up with sand. In the coarse of a few weeks, if everything works favorably, it will be fine and bright and fit for use.

C. N. BEMENT,
In Country Gentleman.

DOMESTIC WINES.—There has been so much mystery thrown around wine-making, that many are deterred from making the effort, that have abundance of grapes. But every family that has two grape-vines in bearing on the lot, may make wine enough for home consumption, better and cheaper that they can procure from the grocer's factory. Its manufacture is simple, and may be done by any one of ordinary capacity. One of the most essential things to be observed in its manufacture, is in the proper regulation of temperature. If too cool, the fermentation is slow and apt to sour; while if there is too much heat, it will soon go in the acetous state. The best general temperature, according to my experience, is between 62° and 64° F. There is little difficulty in maintaining the temperature in a cellar, but it may be observed that the act of fermentation elevates the temperature.

Increase of Insects.

It is a well-known fact in natural history, that there is such a thing as alternate generation; and it is an equally well-known fact to entomologists, that there are viviparous and oviparous generations of the same insect, during the same year. May not the first generation of the army worm be oviparous, and the succeeding generation be viviparous, as in the following case of aphides. All the aphides, it has been well ascertained, which appear in the spring, are exclusively females, no males being found till the autumn; and these females are endowed with a fecundity almost incredible. M. Latreille says that one female during the summer months, will produce about twenty-five a day, and M. Reaumur calculated that one aphis may be the progenitor of 5,904,900,000 descendants. It is not necessary for the young female aphides produced during the summer to pair with a male, which, indeed, would be impossible, as no males are then to be found; yet these females go on producing each their twenty-five a day of living young ones, all of which become, in a short time, as fertile as their parent. The following calculation of the fecundity of a species of aphides, from Prof. Owen's lecture on "Comparative Anatomy," will afford some explanation of the extraordinary numbers in which these creatures sometimes occur, the *Aphis lanigera* produces each year ten viviparous broods, and one which is oviparous, and each generation averages one hundred individuals.

1st generation	.....	1 aphis produces.
2d	"	 100
3d	"	 10,000
4th	"	 1,000,000
5th	"	 100,000,000
6th	"	 10,000,000,000
7th	"	 1,000,000,000,000
8th	"	 100,000,000,000,000
9th	"	 10,000,000,000,000,000
10th	"	 1,000,000,000,000,000,000

If the oviparous generations be added to this you will have a thirty times greater result.

J. H. KLIPPART,
In Ohio Farmer.

Meteorological Observations *kept at Schellman Hills, Carroll Co., Md., Sykesville P. O.*
JULY, 1861. (*Reported for the American Farmer.*)

DAY	THERMOMETER.				WIND.			RAIN	REMARKS.
	7 A. M.	2 P. M.	9 P. M.	D'y Mean.	7 A. M.	2 P. M.	9 P. M.	Inch's	
1	66	73	65	68	N.W.	W.	N.W.	¼	Cloudy; began to rain 6 P. M.; end 8 P. M.
2	66	70	60	63½	N.W.	W.	W.	..	Clear.
3	63	76	70	69¾	W.	W.	W.	..	Clear; 8 P. M. splendid meteor passed from N.
4	60	78	70	69½	W.	S.	S.W.	..	Clear. [E. toward S. E.
5	65	75	70	70	S.	S.	S.E.	..	Clear.
6	70	75	73	72¾	E.	E.	S.W.	..	Cloudy; clear.
7	74	80	78	77½	S.	W.	W.	..	Clear.
8	75	87	80	80¾	W.	W.	W.	..	Clear.
9	76	85	77	80	W.	W.	S.E.	¼	Clear; cloudy; began to rain 5 P. M.; end 8 P. M.
10	74	81	68	77¾	W.	S.	N.E.N	1¼	Clear; began to rain 6 P. M.; end 10 P. M.
11	67	75	68	70	W.	W.	W.	..	Clear.
12	63	73	66	67½	W.	W.	E.	.	Clear. [5 A. M.
13	63	70	60	64½	N.E.	S.E.	W.	¼	Cloudy; clear; commenced to rain 4 A M.; end
14	58	67	60	61¾	N.W.	W.	W.	¼	Rain; clear; commenced to rain 6¼ A. M.; end
15	63	70	67	66¾	N.W.	W.	W.	..	Cloudy; clear. [9 A. M.
16	67	73	73	70½	S.W.	S.	S.	..	Clear.
17	70	75	70	71½	W.	W.	S.	..	Clear.
18	70	83	75	76	S.	S.	S.E.	..	Clear.
19	73	78	75	75½	S.E.	S.E.S	S.E.S	..	Clear.
20	73	81	73	75¾	W.	W.	W.	¼	Clear; 4 A. M. gust; end 5 A. M.
21	65	80	68	71	N.W.	W.	W.	..	Clear.
22	65	65	63	64½	W.	E.	E.	¼	Rain; commenced 6½ A. M.; end 10 P. M.
23	60	72	67	66½	N.W.	N.W.	N.W.	..	Clear.
24	63	77	67	69	N.W.	N.W.	N.W.	..	Clear.
25	60	77	70	69	N.	N.	N.	..	Clear.
26	65	78	75	72¾	W.	W.	S.E.	..	Clear.
27	71	75	70	72	S.	S.W.	S.W.	..	Clear.
28	67	80	70	72½	S.	S	N.E.E	¼	Clear: 6½ P. M. gust; end 10 P. M.
29	73	80	75	76	E.	S.	S.	..	Cloudy; clear.
30	70	84	75	76½	S.	W.	W.	..	Clear.
31	71	85	80	78¾	S.	W.	S.	..	Clear; cloudy.

Monthly Mean, 71 2-5. 3¼ inches Water fell.

HARRIET M. BAER.

One Thousand Weeds at One Pull.

A single pigweed, if left undisturbed, will ripen more than ten thousand seeds, each capable of producing a successor. The seeds of the dock sometimes number over thirteen thousand on a single plant, and the toad flax leaves provide for more than forty-five thousand plants the following year. Burdock multiplies twenty-one thousand fold, and the common stinging nettle ripens one hundred thousand seeds. Scarcely a weed comes to maturity without scattering from one to ten thousand or more seeds, to injure crops and annoy cultivators. This is not mere guess work, for pains-taking investigators have actually counted and calculated the increase. A single pull at the commencement of the season will destroy the whole progeny.

It should be remembered that seeds mature sufficiently to vegetate before they are perfectly dry; and again, that the seeds are ripe on one part of a plant while there are flowers on another. Hence it is not safe to wait till the flowers are gone, before pulling up the weeds. Attack them *before* they blossom. Pull them up, or, if annuals, cut them off when quite green, and spread in the sun to die. He who allows the weeds to grow in his potato field until he harvests the crop, is quite sure to sow many millions of seeds for next year's trouble.

This much for annual and biennial weeds. Perennials, like the dock, daisy and thistle, should be treated with greater rigor. Cutting off the tops once will not suffice. Digging them up one by one, root and branch, is the only effectual remedy. Where they have invaded a whole field, plough up the land in the fall, leaving many of the roots exposed to the action of the winter's frost. Plough again in the spring, taking pains to pick out and carry off every root that appears. Devote the soil to some hoed crop, and let it be thoroughly cultivated through the summer, waging war on the pest without relenting. If they are cut off *below ground* several times in the summer, they will grow weaker at every decapitation. The leaves being the lungs of plants, are essential to their breathing, and if this important operation be stopped, they must soon give up the ghost. Remember, every extermination of a weed this year, is the death of a thousand of a future crop.—*Exchange.*

☞ Men are frequently like tea—their real strength and goodness are not properly drawn out until they have been a short time in hot water.

Fine and Coarse Wool.

No observing person can have failed to notice the change which has occurred within a few years in regard to the quality of the wool of which our clothing is made. Fabrics wrought from coarse materials are used in much greater proportion than formerly. This remark has no reference to the manufacture of cloths for which a special demand has been made by the war, and which has lately brought fine and coarse wools almost on an equality of price in our markets. The fashion of wearing coarse wool seems to have originated in England, and according to the tendency of fashion in many other cases, it is fol lowed by our people, though at a respectful distance. But besides the increased consumption of coarse fabrics for mens' wear, it appears that other descriptions of goods, composed of similar materials, have been introduced to such an extent that a considerable demand has sprung up in France and some other countries for English long wool.

What were the causes of this change? Why have the people of Great Britian resorted so much to the use of fabrics of comparatively coarse material instead of those of finer quality? One answer, and an important one, is doubtless to be found in the fact that Britain herself produces the coarest material and does not produce the finer. And this fact involves another important question: Why does she produce coarse wool and not fine? Because she has a large population in proportion to her territorial area to support, and it is her desire to produce the greatest possible amount of food and clothing within her borders. It has been pretty well demonstrated that this object can be better attained by keeping sheep which bear rather coarse wool, than by those yielding the finest quality.

From these facts certain inferences and deductions present themselves which are more or less applicable to our circumstances. The demand for mutton in our markets is rapidly increasing, and must result in an increase of the sheep from which it can be made at the least expense. This result will be accelerated by the increased demand for the coarser wools. Britain intends to supply herself with fine wool from her Australian colonies, where land is cheap and mutton of little value. We can produce fine wool in our Western States, and in sections where the cheapness of land and other circumstances may render it expedient. The cost of transporting it to the Atlantic cities is trifling while the expense of sending mutton the same distance is comparatively great.

Our attention has been called to this subject by reading a valuable paper presented at a late meeting of the Royal Agricultural Society by Mr. Caird, a member of Parliament, and a report of the discussion which followed. Mr. Caird gives the number of sheep in the United Kingdom as 30,000,000, producing annually 120,000,000 lbs. of wool, or an average of four pounds per head. The importation of wool into Britain in 1859, amounted to 133,000,000 lbs., of which her own colonies furnished 82,000,000 lbs. But nothwithstanding this vast increase in importation, it is said "the price of British wool has not only undergone no diminution, but its production continues to be one of the most profitable branches of our agricultural industry." The explanation given of this result, is that there is an increased demand for the home-grown wool, both for domestic and foreign manufacture—France and other continental countries having taken from Britain in 1859, no less than 58,000,000 lbs. of long wool. It appears that, although some of the finer varieties of British wool, as the Down, have formerly brought much higher prices per pound than the long wools, there is at present but little difference in their value. Mr. C. closes his paper with the following practical suggestions:—"That the British wool-grower should develop as much as possible that kind of wool which is least subject to foreign and colonial competition, and for the production of which he fortunately possesses both the most suitable soil and climate, and the supply of which can be best increased by good farming, liberal feeding, and with a large frame of mutton, as well as a heavy fleece of wool. For this purpose the best cross probably that can at present be adopted on suitable soils would be by using the improved Lincoln or Leicester ram, in which the desirable qualities of length, lustre, strength, and fineness of wool seem to be best combined."

Professor Wilson thought the Lincoln and other long wool breeds, produce the wool that is most valuable for its lustrous properties, which are essential in particular fabrics. He said that from information he had obtained in France and other countries, it appeared to him that the day for the fine qualities of wool was fast passing away. "We know," he said, "that none of us wear the fine Saxony cloths that we used to wear when the Merinos were cultivated, and wool was sold at a high price to manufacture an expensive material to be worn by the few. The great object of the day now is to get a cheaper article that can be worn by the many, and Bradford, Leeds, and all those parts of Yorkshire, testify

to the fact that the manufacture of the looser goods, which are made from long wools, are rapidly increasing; while the manufacture of finer goods from the short wools is as rapidly decreasing; and the consequence is that clear headed farmers on the Continent see that they have not that demand for the expensive, and not easily cultivated short wools; and that it will be their policy to change, as rapidly as they can, their Merinos to a breed of sheep that should give them more mutton, and a larger quantity of a cheaper description of wool." He stated that nearly all the Merino flocks in France had given place to what is called the Metis Merino, a cross breed, and these in turn are giving way to a cross with the Leicester.

The Chairman, Mr. T. Raymond Barker, said the habits of the people had greatly changed. When he was a young man a person would be affronted if his tailor offered him cloth at anything less than 24*s*. or 25*s*. ($6 to $6.25) a yard—finest Saxony. Expensive cloth was scarcely ever worn at the present day, and hence the necessity for wool growers to change their mode of operation."

Various practical ideas in regard to the management of sheep were brought out during the discussion, one of which was that the quality of wool depends much on the manner that the sheep are fed, a point which the best wool growers in our country well understand. If sheep are well fed at one time and starved at another, the wool will be uneven in staple, will be weak, and will neither spin well nor make good cloth. One speaker stated that rape-cake produced the strongest and best wool. Another that all oily kinds of food tended to strengthen and increase the weight of the wool, and impart lustre to it.—*Boston Cultivator.*

SOME PLANTS IMPOVERISH THE SOIL MUCH MORE THAN OTHERS.—Plants are not only nourished by the roots, but also by their leaves; those that have succulent leaves of open texture—such as *peas*, *beans*, *turnips* and *potatoes*,—derive much of their nourishment from the air, and therefore less impoverish the soil than *wheat*, *barley*, *oats*, *rye*, &c., whose leaves, being of firm texture, depend more upon the root for support. All plants whose seeds yield oil—such as *rape*, *flax*, *hemp*, &c.,—are the greatest of all impoverishers of the soil. All true succulent plants—such as *sempervivum*, the house-leek, Aloe, Stapelia, Mesembryanthemum, &c., derive by far the greater portion of their food from the atmosphere, and all crustaceous lichens growing in rocks, the bark of trees, &c., derive it entirely from the air.—*Scottish Farmer.*

Stock Raising—Horses.

This if not the most important is one of the most important branches of stock-raising.

Everybody likes to drive good horses, yet how few take much pains to raise them.

It costs little or no more to raise a good horse than a poor one. Any one who owns a good sound mare may raise good colts; they may not be Flora Temples, but if a little care is exercised, will be good, and may be excellent.

Henry William Herbert truly said when speaking of the horses of this country, that "If a horse will carry his rider without kicking him on his head, or draw him in his wagon or buggy without kicking it to shivers; if he will go off at a walk, increase his speed to the top of his gait, and stop again when pulled upon without running away; if he will hold back going down hill; if he will not balk going up hill; and more particularly if he will stand at a door without tying,—he is held to be fully broken, and is willingly received, credited and paid for as such."

I will suppose that the farmer owns a mare and wishes to raise colts. Too many will procure the services of the nearest or lowest priced (not cheapest,) horse. This is a grand mistake with any kind of stock, and none more so than with the horse. The stallion should be chosen with regard to the mare, and kind of service desired of the offspring. If the colt is wanted for a common farm horse, for working and driving, then choose the horse accordingly; if the mare be narrow-chested, then choose a wide chested horse; if she is too short legged, choose a long legged horse.

After selecting your horse, little can be done until the mare is nearly ready to foal. This is a critical period both for the mare and foal. *Moderate* work will not injure either even within twelve hours of foaling time; but unless it is absolutely necessary, it should be avoided for a day or two. As the time of foaling approaches, if the mare is worked, she should have more generous feed, for she has not only herself to support but also her colt.

In warm weather a cool, airy place is best; but in cold weather, warm shelter, but not close, should be provided. A little extra care and feed at this stage will be amply repaid. After this, nature should be allowed to perform her task. As soon as the colt can stand, let it be handled and petted and even be haltered. It is much easier to handle now than when one or two years old. It is better to allow it to follow the mare when she is at slow work; the exercise will be of use to it, and it can obtain its food whenever it is hungry.

Let the colt be accustomed to have its feet raised and struck with a hammer or stone; let it be led about with a halter or by the forelock. At this age punishment should never be resorted to, but rewards should be given often.

This petting and handling could be continued until the colt is two or two-and-a-half years old, then he may have the bits and surcingle. At three years old the gears may be put on him, a piece at a time, taking care never to frighten him with them. Before hitching him to the wagon, let him become accustomed to the gears and straps hanging about him. Let him smell everything about the wagon that he is afraid of. Place him along side of a quiet horse, and if his former education has been properly conducted, there will be little or no trouble. Let him be petted and rewarded with a handfull of corn or oats occasionally.

Patience and good temper are now very important items, and if the breaker lacks these two qualities, the colt stands a good chance of being spoiled. *Learn him to walk fast, for whatever habit he now acquires will mostly be permanent, or very hard to eradicate.*

Let him first draw the empty wagon down a slight grade, then up it; then with a load gradually increased; but care should be taken not to continue the first lesson too long, or he will become tired and worried.

One thing is certain, that care and patience at this stage, will amply repay itself in the future.

Do not put him to hard work while young; a year's exemption from hard labor will add four or five to a horse's life.

After the colt is trained to single harness do not drive him at the top of his speed too often, and never with a woman in the carriage, who is likely to drive him within the next four or five years; for if she sees him at his best, that best he must do whenever she drives him! Or perhaps my meaning will be better shown from the following quotation, which, though slightly exaggerated, is too true:—"Let a woman—*any* woman, for they are all alike on this subject, and no one has any more sense than any other one—understand that Flora Temple had trotted her mile in 2.19¾, and let that woman have Flora to drive for a day, and she'd flog the life out of the gallant little bay mare if she didn't keep up the same speed for 12 or 14 hours a day." If she could not get a 2.40 go out of a horse, she would get a "*three go.*" [What a slander! Mr. Harrow, you are too hard.—Ed.]

Some time since I was called by a neighbor to tell what was the matter with his colt; she would sometimes, in the evening more especially, hang her head and appear languid. He thought she wanted a dose of some kind of medicine, and if he had known what to give would have administered it. All that seemed to ail the colt was that like the patriarch Isaac, she was meditating at eventide.

Moral—Don't dose a colt with medicine unless you know what is the matter—or that *something* is the matter, and oblige your friend,

SPIKE HARROW, Esq.

Irondequot Farm, Chester County, Pa.

Ger. Telegraph.

When to cut Timber.

The long and ably contested cornstalk and timber cutting controversy, reminds me forcibly of my first experience in gulf stream sailing. As a boy commander of a saucy little "down east" brig, I didn't know quite as much about the western ocean as I have learned since, and once I got her into the gulf stream, and thought I was going towards New-Orleans prodigiously, by keeping her pointed for five days due *southwest*, all the while with thick, cloudy weather, and no observation for latitude. On the sixth day the sun came out, and one may imagine my astonishment when my meridian observation put me 450 miles *further north* than I was when I commenced the race with Cape Hatteras. I had been going stern formost all the time.

My genial, jolly shipmate, "Old Hurricane," seems to me to have rather got to wind'ard of all his opponents on the cornstalk tack, but having very few stalks myself, and fewer cattle to cut them for, I shall let that question slide, and muster into service a few stubborn historical facts in relation to the timber cutting question.

In 1812 there was built at Sacketts and Store's Harbors, on Lake Ontario, the following government vessels, constituting a portion of the fleet under the command of Com. Chauncy during the war—the ship Madison, brigs Oneida and Sylph, and schooners Julia, Growler and Lady of the Lake. These vessels were all built during the winter, from timber cut and hauled directly from the woods—the Oneida having been finished and launched in sixty days from the time her keel was laid. After the war, all except the ship Madison were employed in the merchant service. She was condemned in 1817 as being too rotten for service. On Christmas day, 1825, the Lady of the Lake foundered in a gale, her captain, crew, and twenty-one passengers going to the bottom with

her. She was built from the "leavings" of the Madison, and was perfectly sound when lost. The Julia was captured by Yoe; the Growler was as rotten as muck in four years from the day she was built, while at thirty years of age the Oneida and Sylph were as sound as "hearts of oak."

On Lake Erie the British flag ship Queen Charlotte was built in the summer time at Malden, from timber cut in the vicinity, and used as fast as cut. Perry's flag ship the Lawrence, was built at the same time, at Presquisle, from Pennsylvania oak used as fast as it could be cut and hauled. The Lawrence rotted in five years, while the Queen Charlotte, when sent over the Niagara Falls at the age of *forty years*, was hard and sound. The U. S. Frigate Hudson was built in New-York by contract, from Jersey oak cut during the summer, and in four years she was condemned as a rotten hulk. The U. S. Brig Lawrence was built in Baltimore, by contract, from Maryland oak cut in winter. She made *one cruise*, and was condemned and sold for $725, being a mass of dry rot.

I once took a Massachusetts built ship around Cape Horn in her 43d year, built of Massachusetts oak cut in winter, and I never saw a speck of rot about her. A twin ship built at the same time from Virginia oak cut in summer was as rotten as a "pear" at nine years old.

Of two large steamers built at the same time at the mouth of Black River, south side of Lake Erie, from timber cut in winter, one was dead and rotten, or rather rotten and dead, in 9 years; while the other, now 26 years old, exhibits little symptoms of decay; and, as a final example, there is at this time, belonging to Baltimore, a bark trading regularly 'round Cape Horn, and a staunch, safe, sound craft too, (as I know, having made a voyage in her myself,) that was built from summer cut timber in 1811. Her consort, built at the same time, and of like material, went to decay in her 12th year.

Wherefore, in view of these facts, I argue that waiting for particular signs and seasons in which to cut timber, is much like the popular superstition of sailors against sailing from port on Friday. My advice (not that I insist upon its being universally followed) is, go to sea when you are ready and the wind serves; and cut timber when it best suits your convenience, be it spring, summer, fall or winter, as I believe the *constitution* of the tree itself has more to do with its after preservation than the influence of any particular season has.

R. C. KENDALL,
In Country Gentleman.

Humble Bees Topers.

[From Bee Journal for August.]

Of the especial love of the humble-bees for the nectar of the Passion-flower, and the effect which it has on them, the following paragraph gives a graphic description.

"We regret extremely to announce that some honest humble-bees of our acquaintance have taken to drinking, and to such excess that they are daily found reeling and tumbling about the door of their houses of call—the blossoms of the Passion-flower, which flow over with intoxicating beverage; and there, not content with the drinking like decent bees, they plunge their great hairy heads into the beautiful goblet that Nature has formed in such plants, thrusting each other aside or climbing over each other's shoulders, till the flowers bend beneath their weight. After a time they become so stupid that it is in vain to pull them by the skirts and advise them to go home, instead of wasting their time in tippling. They are, however, good-natured in their cups, and show no resentment at being disturbed; on the contrary, they cling to their wine goblet, and crawl back to it as fast as they are pulled away, unless indeed they fairly lose their legs and tumble down, in which case they lie sprawling on the ground, quite unable to get up again."

If this account be not over-colored, these jovial, reckless proceedings of humble-bees are in strong contrast with the temperate habits of hive-bees, which, to judge from the interesting account Mr. Wailes has given of their visits to his Passion-flowers, hurried back to the hive as soon as they had imbibed their supply of nectar; and certainly the anecdote given by Huber, of the way in which humble-bees suffer themselves to be cajoled out of their honey by the hive-bees, indicates such a good-natured weakness of disposition as may easily be supposed to be combined with a propensity for carousing, when the opportunity presents itself. To speak seriously, however, it would be well worth ascertaining, by exact observations, whether as great a contrast between the temperance of humble-bees and hive-bees in feeding really exists, as between their easiness of temper. There can be no doubt that some races of insects vary as much in this last respect as some races of men. The difference as to irritability, between the temper of wasps and that of bees, is known to every one, but has never been so happily hit off as by Christopher North, (whose universal genius adorned every subject,) in the description of it which he has put into the mouth of the "Shepherd" in one of the *Noctes*, and which well deserves transcription

here from the pages of the voluminous periodical in which it has lain entombed for thirty-five years.

"*Shepherd.*—O' a' God's creatures the wasp is the only ane that's eternally out o' temper. There's nae sic thing as pleasin' him. In the gracious sunshine, when the bees are at work murmurin' in their guazy flight, although no gauze indeed be comparable to the filaments o' their woven wings, or, clinging silently to the flowers, sook, sookin' out the honey-dew till their verra doups dirl wi' delight—when a' the flees that are ephemeral, and weel contented wi' the licht and the heat o' ae single sun, keep dancin' in their burnished beauty, up and down, to and fro, and backwards and forwards and sideways, in millions upon millions, and yet are never jostling against anither, but a' harmoniously blended together in amity, like imagination's thochts—why, amid this 'general dance of minstrelry,' in comes a shower o' infuriated wasps, red het, as if let out o' a fiery furnace, pickin' quarrels wi' their ain shadows—then roun' and roun' the hair o' your head, bizzen' against the drum o' your ear till you think they are in at the ae hole and out at the ither—back again after makin' a circuit, as if they had repentit o' letting you be unharmed, dashin' against the face o' you who are wishin' ill to nae livin' thing, and although you you are engaged out to dinner, stickin' a lang poishoned stang in just below your ee, that afore you can rin hame frae the garden swells up to a fearsome hicht, makin' you on that side look like a blackamoor, and on the opposite white as death, sae intolerable is the agony frae the tail o, the yellow imp that, according to his bulk, is stronger far than the dragon o' the desert."—*Blackwood's Mag. Oct.* 1826.

Wash Your Pigs.—Pigs are not dirty when they have any encouragement to be clean. Ours are washed every week in warm soap and water, and well scrubbed behind the ears and everywhere to their great ease and comfort. A highly economical remark of my man about this part of his work was, that he scrubbed the pig on washing days, because the soap-suds did just as well for manure after the pig had done with them, "and that," said he, "makes the soap serve three times over."—*Our Farm of Two Acres.*

☞ If a pair of oxen stand up against each other in walking, it is a sign they are not well matched. When lovers do so, it is a sign they want to be.

The Culture of Timothy and Clover.

The following essay was read before the Farmers' Club, of Chester county, Penn., by Mr. John D. Evans:

Timothy and clover certainly embody more qualities advantageous to the farmer than any of the other grasses; yet of late the uncertainty of their growth, the falling off in their productiveness, together with the necessity for having a more steady and uniform supply of green food during the grazing portion of the year, have instituted an inquiry and search for a substitute—thus far, without success, timothy and clover still remaining general favorites.

It is here proposed to prevent by cultivation, at least in a degree, these failures rather than substitute a new or foreign variety.

The first, and generally the greatest damage clover sustains, arises from the decrease of moisture in our climate, and high, dry winds that prevail towards the middle and end of spring. This damage can be obviated in a great measure by sowing the seed on freshly fallen snow, and this can be usually accomplished from the middle of February to the middle of March. The seed sinks into the ground, softened by the melting snow, and becomes completely covered with earth, thus not only preventing the seeds from sprouting during the first day or two of warm sun, to inevitably perish, but retarding the growth of the germs until the weather is more steadily warm; and when the rootlets do start, they are protected from the effects of dry winds and sun, so fatal to all exposed.

Besides the dangers attending clover in its early stages, it sometimes dies out during the second fall after sowing, particularly if it were well grown the first fall, and well matured before mowing; or after mowing, if the second crop be a heavy one and left untouched to go down and lay on the ground until late in the fall. Pasturing after the wheat comes off, if the clover is well grown, and also after mowing, and in the other case mowing early, will, it is believed, in both cases prevent any serious injury.

Clover is rarely injured by frost the first winter after sowing, owing, it is presumed, to the looseness of the surface of the soil, particularly if lime has been spread during the fall or winter following the wheat. The smallness of the root may contribute to some extent to save the young plant.

When the ground is wet or clayey, plowing it into six-step lands for the wheat has a good effect, and if the additional precaution is taken to sow such land with a minimum quantity of

eight quarts of clover seed, with seven quarts of timothy and one bushel of orchard grass per acre, small damage will result from frost.

Timothy is not liable to injury in its early stages, of growth, and rarely fails if sown immediately after the drill or before the ground has settled after harrowing or being rained upon.

The objection to this grass, that its growth after mowing is too slow, and affords but little fall pasture, arises in a great measure from its being generally mown off too closely. Fields left for seed, or for any other cause not shaven close to the ground as is usual, it will be found to be but little behind clover in yield for fall pasture, and will grow much later in the season.

Abundance of seed per acre is of more importance than is generally attributed to it. Failures have frequently resulted from sparse, but rarely or never from liberal sowing; and if but one precaution could be taken to secure good crops of timothy and clover, that one should be abundance of seed—one half bushel being the minimum quantity of grass seed per acre.

This opinion is irrespective of its direct fertilizing effects on the soil, which opinion is evidently gaining advocates among agriculturists—probably forced on them by the increasing evidence that even our best lands are not only losing an original capacity for growing many plants to a high state of perfection, but also a susceptibility to the action of our long used or common manures.

Guano—Loss from Exposure.

The Irish Farmer's Gazette, one of our best European exchanges, says:

"Continued exposure to strong sun will rob the guano of all its best qualities, and render it all but worthless."

A good, *sound* guano, *kept perfectly dry*, might be exposed to the hottest sun for any length of time without much loss. The general opinion is that the ammonia of the guano, being a gas lighter than the atmosphere, would evaporate if exposed. But the fact is, that though a good Peruvian guano contains nitrogenous compounds equal to sixteen per cent. of ammonia, there is very little *ready formed* ammonia in a *sound* sample of guano. Moisten the guano with water and keep it in a warm place, and it will soon ferment, and carbonate of ammonia will be formed. If in this condition the guano is exposed to the sun and air the ammonia will escape. But as long as it is kept dry there will be little if any loss.—*Genesee Farmer.*

Farming for the Love of it.

The following has the ring of the true metal, albeit it comes from the land of wooden nutmegs. The Connecticut *Homestead*, from which we copy, is one of our most valued exchanges. While frequently indebted to it for good "copy," it is seldom it has furnished it more to our mind than in the following. "Does farming pay?" is a frequent question, and variously answered. In the nature of things it surely ought to pay, and if it does not it is rather the fault of the farmer than the farm. But we love to see the man who is ready to give his farm credit for more than the dollars and cents it returns him. Who appreciates all the blessedness of a quiet country home, all the daily comforts it yields, and the thousand varied enjoyments to be found in plants and animals, fruits and flowers, and who in return and for the sake of all these gentle ministrations *gives his love* to his home and all its surroundings, and begrudges nothing needed for plant or animal, because he has not calculated to a cent whether it will pay.

We only intended, however, to introduce the article from the Homestead, and here it is:

"It is refreshing to find occasionally a farmer so imbued with the spirit of agriculture, with the love of his plants and animals, with the real esthetics of the meadow, the mow, and the milk-room, the barn-yard and the compost-heap, with the justice of giving every animal and plant the best possible chance to do its very best, with a sense of the crime against his loved children of the field and the pasture, such that nothing could induce him to overstock the carrot-field any more than the pasture, that every weed is viewed as an implacable enemy to which no quarter *can* be given; so imbued with this true agricultural spirit that he enjoys the perfect preparation of a field quite as much as the harvesting of the crop, the growth and luxuriant development quite as much as the full fruition, and the rearing and feeding of his cattle a great deal more than the chink of the gold in his pocket when they are sold to the butcher.

"Our intercourse with farmers within the last few years has occasionally brought us in contact with such men. They are the richest farmers we know—not all rich in gold and lands—once in a while one will make money like a government contractor, but it is always a secondary consideration, and because he can't help it very well, and knows how to spend and invest it in his farm to the best advantage. It is no fault of his. This class of men are usually only passably 'well-to-do,' as the saying is, which means per-

haps, well off if they keep doing—but enjoy everything that God made, from the glorious comet just faded from sight to a mealy potato, without a thought of whether it cost anything or nothing, whether it is theirs in fee simple or whether the right of property is vested in the great Mogul or their next-door neighbor, so be it it is theirs to enjoy. This right to enjoy is worth all the rights in fee simple or complex all the deeds and courts in the world can confer or establish; it is God's deed to the meek whereby he inherits the earth, —and who wants a better title or inheritance till he inherits heaven?

"Here is the postscript of a letter from one of these choice spirits, which we venture to give to our readers, as it gave the point to our pen this morning:

"'P. S. I say, Weld, I'm tired of this talk of making farming pay. Don't you know that life should be a sacrifice? I wish money-seekers out of farming; and I have my wish mostly, too.

"'In some recent number of the Gardener's Monthly, Meechan says that profit shouldn't be thought of in horticulture—that is, that all work in that line should be faithfully done without counting the cost. Just so with agriculture, and all work, in fact, that is worth doing. This barely making things pay is the ruin of my chivalrous sense of honor in farming. I want to go through life earning more than I get of this world's goods. The continual jingle of pennies is not music for the march of noble minds. We glorify the scum of our population for going soldiering; and why? Because the pay they get bears no relation to the risk they run.

"'Just look at the distinction made between produce 'for market' and such as is really the best of its kind! What is a 'market' strawberry, or apple, or potato? It is something that I don't think fit to use myself—something only made to sell. To make a profit in farming, as in other business, one must continually be hatching up some novelty, that looks much better than it is—something for 'market.' I feel better satisfied when I am straining every nerve to produce the best, even if I lose money. I might do a thousand times more, and never come up to the pattern. You scarcely dare, yourself, to recommend a course of action, unless you can show in some way that it 'pays.' If it is the best way, that ought to be sufficient.'

"—Not exactly. We argue in general that well-doing does pay. Good crops, in the long run, good and improving soils, superior stock, and all that are advocated because they are best, but in the view of their paying best, too; and happy is he who does not love the latter quality so as to forget everything else. Bread is a pretty important thing in assisting to make up the grand sum total of human happiness; but, once possessed of something to eat and to wear, let us thank God and enjoy everything else he has given or lent us, being good farmers not for the money's sake, but for our own, for humanity's, and for God's sake."

The Principle of Adaptation.

Prof. J. G. Hobson, in a late lecture before the Central Farmers' Club, on the "Mutual Relations of the Vegetable and Animal Kingdom," made the following remarks:—

Nature, we are told, affords an appropriate vegetation to each class of animal. It is not by accident that the reindeer finds its support from the snow-covered lichen, or the camel from its thorny shrub, or the chamois a sufficient supply in the scanty vegetation of its Alpine home; but it is in obedience to that great law of Nature, that wherever plants exist we find animals adapted to make use of their nutritious products. The same principle applies itself, in a more familiar sphere, to the selection and management of stock, the grazing of cattle and sheep, with reference to soil, climate and herbage. And no problem connected with the economy of farming is more important to be solved than the adoption of the breed of cattle and sheep most calculated to yield the largest balance of profit from the food consumed, with the most judicious general management. How would the heavy Cotswold or the fat Leicester enjoy a scramble, in company with the active game-like little Welsh, in search of a scanty breakfast on his native mountains?

What has been done by skill, capital and enterprise, in bringing to perfection some of our choicest breeds of cattle and sheep, is too well known and appreciated to need especial reference. It has not, however, been effected without a constant studious attention to the principle I am advocating, on which success mainly depends. The food directly or indirectly derived from vegetables, must be skilfully adapted in quality and quantity to the requirements of the animal to be sustained or fed; and the animal must have such a vigor of constitution, and aptitude to thrive and fatten as shall enable it most beneficially to assimilate the largest amount of nourishment to be derived from the food presented to it. The formation of animals, breeding and grazing in all their departments, are amenable to this law of vegetable and animal dependence. How much valuable food is wasted by badly-bred animals,

with no robustness of constitution, and but little aptitude to fatten; and how many a well-bred animal is ruined for want of suitable food and skilful general management! If the master's eye grazes the ox, assuredly it should not long be diverted from the fold if he would avoid that "*one* bad day!" which every flock-master knows too well will take many a good one to recover.

Preparation of Seed Wheat.

MR. EDITOR: I am one of those who believe in good seed, no matter whether it be for the garden or field, or whether wheat, rye, corn, or buckwheat. I am particular always to get good, clean, dry seed, that is, seed which has been well cured before housing, and well cared for afterwards. Next, I always give a preference to new wheat, and an additional preference to that which is not thrashed until just ready for use. Again, my seed wheat is always steeped in a liquid before sowing. I adopted this plan from a recommendation given in an agricultural paper many years ago. All wheat, or almost all, is infested with spores of fungi, which, though not visible to the naked eye, are nevertheless "*thar*," and in sufficient quantities, generally, to do damage.

My plan is, to take from a pound and a half to two pounds of blue vitriol, (sulphate of copper.) Dissolve this in from two to three gallons of hot water, and let it cool before using. Spread the wheat on the barn floor, and with a common watering can sprinkle the solution over it, at the rate of about three pints to the bushel of seed. Then take a shovel, and turn the wheat over and over, until it is uniformly dampened. Be particular in doing this. It will be ready for sowing next morning, if done in the afternoon. Rats will not eat when thus prepared, and fungi will be completely destroyed by it.

If you think the above worth a place in your columns, it is at your service. R. S. T.

Chester Co., Pa. In Farmer and Gardener.

Eschew Corks for Closing Preserve Bottles.

For the preservation of all kinds of fruit, use glass bottles or jars. They are cleaner, more durable, more costly at first, but cheaper in the end, than tin, and transparent. Select those of even thickness, or rather of even *thinness*, for they are often exposed to considerable heat, and while they should not be so thin as to break in common handling, or burst from internal pressure caused by fermentation, still they should not be thick, or of pressed glass, when blown glass jars can be readily obtained. So much for the bottles. Now as to closing them air-tight. 1st, corks will not do it. The very structure of the substance is against it, unless cork of the most velvety character is obtained, and this is costly. We have in previous volumes recommended wax cloth tied over the jar as a substitute at once cheap and effective, and have never found any thing superior to it. Prepare the cloth in this way: Melt together some rosin, beeswax and tallow in equal parts; tear the cloth in strips four inches wide, or at least wide enough conveniently to tie over the mouth of the jar, and dip these strips, drawing them through the hot wax and stripping nearly all the wax off. With cloth thus prepared, after the jar is filled with the hot preserves, and while still hot, close the mouth and bind it on with good linen cord. Then with shears trim off as much of the wax cloth as is desirable, and then dip it in some melted wax, which should be made with only about half as much tallow. Sealing wax may be used if desired. The jars should be put where the wax will cool at once, so that the exhaustion caused by the cooling of the preserves and the condensation of the steam, may not cause the wax to run through the cloth. Nothing can be more thoroughly air-tight than bottles so prepared.—*Homestead.*

Is Corn Smut Poisonous to Cattle?

Mr. E. Wood, of Lester, Iowa, says the *Prairie Farmer*, lost three oxen, three cows and three calves last winter, he supposed from eating the snouts of cornstalks. He raised one and a half acres of King Philip corn, which was very smutty, "not only many ears with smut upon them, but occasionally bunches of clear smut—all left on the stalks, bound and stacked." When cold weather came on the cattle were fed plenteously on these stalks. On the morning of the third day he found one dead, the eight died within two days. They were supplied with water daily. "The first symptoms were weakness; would reel in walking. If lying down would lie apparently easy for two hours; then begin to twitch or jerk the shoulders, breathe hard, roll on the side occasionally and groan. For one or two hours before dying, would lie continually on the side, with legs stretched out, and manifest extreme pain; would die within six or eight hours after showing the first symptoms of the disease." All masses of smut grown on cornstalks, or any part of the ears of this grain, should be carefully removed, so as not to taint the fodder or seed of the plant consumed by man or beast.

Liming Land.

There is no part of the country where the practice of liming land is so general as in Chester county, Pa. They are capital farmers there, and every one uses lime. L. H. T., of the Country Gentleman, has made an editorial visit to that county, and here is what he writes on this particular subject:

As to the effect of lime, I was told of farms which would not cut half a ton of grass or five bushels of wheat per acre, by its application alone made to yield within four years, crops three times as large—say a ton and a half of hay and fifteen bushels of wheat. Upon its first application, I suppose that dressings as heavy as a hundred and fifty or two hundred bushels per acre may have been given; but the weight of experience appears to lean now to smaller and more frequent applications, and fifty bushels on thinnish land, and one hundred on the best and strongest soils, put on at intervals varying from six to ten years, or thereabouts, may be regarded as the customary rule. Employing the one apparently unvarying rotation of corn, oats and wheat, followed by grass, circumstances regulate the length of time that shall elapse before the grass is again broken up for corn, when, almost invariably, the liming is renewed. If, as is quite common, the grass is mown for two seasons and pastured two more, the rotation becomes one of seven years, with a liming always at its commencement; but if the pasturage is extraordinarily good, it may remain eight or ten years before being broken up—in rare cases, perhaps, receiving a top-dressing of lime during this or a still longer period, although such a mode of farming would be regarded as out of the usual routine.

The generally excellent natural drainage of the land already referred to, doubtless renders the efficacy of lime peculiarly great on the soils of Chester; for I suppose there is no fact more clearly proven, than that its action is at best exceedingly imperfect where stagnant water approaches the surface, or where even the escape of that which falls in rains is seriously impeded. Upon land seeded down to clover and timothy—the natural grass of the region—the *poa pratensis* of botanists, the "blue grass" of Kentucky, the "smooth-stalked meadow grass" of English writers, and the "green grass" of Pennsylvania and Delaware, here comes in of itself, together with white clover, forming a fine, compact sod. Upon turning under this sod, preparatory for a renewed course of cropping, the decomposition of its matted roots and stems is accelerated by the action of the lime, and they are at once made available for assimilation by the ensuing grain-plants, while at the same time the soil appears to be rendered mellower in mechanical condition, and cleaner of weeds. It is probably in these respects that the application of lime so frequently as once in six or eight years is found to be warranted by experience although there are some who question whether this course is not now adhered to from long habit, rather than from certain evidences of its necessity.

Again, I suppose it is an accepted fact, that the repeated application of lime as a sole dependence, without the use of stable manure, or without *allowing the land to lie in pasture* for a due proportion of time, is rather exhaustive than beneficial in its effects, by drawing too heavily and rapidly upon the vegetable constituents of the soil. But in Chester county much attention is paid to the management of manure; and as it is a grazing country, there is no temptation to break up pastures prematurely. As I was returning to Philadelphia in the company of M. B. Hickman, Esq., an extensive and observant farmer, I enquired whether, after the application of lime for so long a period of years, there had been any symptoms of decline in the production of the land, or diminution of the benefit derived from it; his answer was decidedly in the negative: those who "limed most, have been pretty sure to manure most;" they are the best and most careful farmers in other respects, and their land is constantly advancing in productiveness. In the days before liming, a farmer on two hundred acres was a "poor man." He thought that during the past twenty years, particularly, the custom of liming had advanced with great rapidity.

Seed Wheat.

The old fashioned method of saving the best of the harvested grain for seed and then beating the sheaves moderately with a flail, so as to thresh out none but the better and more easily shelled kernels, is just as sound in theory now as then, and will be found to work equally well in practice. This practice has been followed in England for a long while, and the gradual improvement of their grain in quality and in quantity per acre is a significant fact, worthy of attention.

There can be no question but that much of our seed wheat in these times of machine threshing, is materially damaged by the breaking of the kernels in the process of threshing. Any one may convince himself of this by examining the wheat as it comes from the machine.

We throw out these hints now, that they may be in time, and trust that they will be considered and acted upon.—*Wis. Farmer.*

The American Farmer.

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The Agricultural College.

We repeat the statement made last month, that the Agricultural College will be duly opened on the 9th of September, and beg our friends to bear it in mind. The College, in common with every institution of the sort, is feeling the effects of the unpropitious times, and we hope those friendly to its purposes will use their utmost efforts in its behalf.

PLEURA PNEUMONIA.—A writer in the *Farmer and Gardener*, from Delaware County, Pa., in allusion to this fatal disease about which there was so much excitement a year ago, says, "We hear of no 'slaughtering committees,' nor yet of the disease attacking whole herds simultaneously; but we have what is equally to be dreaded, the disease on almost every farm, developing itself with greater or minor degrees of virulence, according to circumstances, and causing the death of a large number of valuable cattle."

CLOVER—TIME OF CUTTING.—John Johnson, noticing the remark that clover hay is preferred to timothy in England and Scotland, says in the *Rural New Yorker*, "There they cut it before any of the blossoms begin to fail; here, I am sure, nine-tenths, if not ninety-nine in a hundred, allow it to stand till a large majority of the blossoms are dead, when it is worthless for hay. True, it will keep stock alive if they get enough of it, but if hay is not cured so that it will improve stock, it is a dead loss to feed it."

☞ "On loamy soils needing lime, (as shown by the growth of sorrel, yellow dock, and the like,) we think very favorably of applying a muck and lime compost, &c."—*Country Gentleman, July* 19, 1860.

Will the *Country Gentleman* please observe what the *American Farmer* has established years ago, beyond question, that the growth of sorrel *does not* indicate the need of lime. Whenever its intelligent travelling editor will give us the opportunity, we will show him farms enough in Maryland, whose natural growth under careless and unskilful culture was "sorrel and the like," but which for years past have been capable of yielding thirty bushels of wheat to the acre under favorable circumstances, and in some cases have much exceeded this, without the application of a shovelful of lime, or any other external fertilizer containing lime, except about an average application of half a bushel of gypsum a year.

Fine Grapes in the City.

We had the satisfaction recently of inspecting a very fine growth of grapes in the yard of Mr. Thomas Baynes, on East Pratt street. While Mr. Baynes' great success in grape culture is doubtless due in a great measure to skill and care, it shows at the same time what is quite possible to every man or woman in the city, who has a few square yards of soil and the side of a house at command, *viz:* a supply of grape of their own raising.

Under a cheap lean-to covered with glass, there is a fine growth of Black Hamburg and other exotics, while out of doors the principal natives thrive most luxuriantly on the side of the house and on trellises. The Catawba is the most profitable of these. He has realized as much as five dollars a season from a single vine, with eight feet of trellis room.

Mr. Baynes has some peculiarities of culture which are exhibited in a little pamphlet he has published, with full directions for the profitable culture of the vine.

A Furnace for Firing Tobacco.

Mr. Bibb, of the Baltimore Stove House, with Messrs. G. F. Needham, of Baltimore, and G. W. Dorsey, of Calvert county, have patented a furnace to be used in tobacco houses, which, if it proves successful will be invaluable to planters. Its purpose is to introduce heat into the house, and regulate it so completely as to enable the planter to cure his crop without smoke, and without danger of burning. Every planter will understand at once the value of the design. It

proposes moreover by means of an evaporator in connection with the furnace, to make a "stripping season" whenever it may be wanted, or in other words by the application of moist, warm air, to bring the tobacco into condition for stripping, whenever it may be desirable, and keep it so as long as necessary. To what extent the patentees may succeed in accomplishing these purposes is yet to be determined. We wish them all success, and do not doubt they will find a large demand for such furnaces, whenever it becomes apparent they will answer the proposed ends. They will be fairly tried the coming season, and in the meantime any one feeling curious as to the matter, may have an opportunity of seeing the furnace at the stove house of Bibb & Co.

☞ In answer to a correspondent, making inquiry about the Squash Bug, Mr. P. R. Uhler is so obliging as to furnish us the following:

Messrs. Editors:—The insect about which your correspondent requests information, is a common and very well known species. It was described and figured so long ago as 1773, by the Swedish naturalist, De Geer, who called it *cimex tristis*. Since then it has been re-described by several authors who have applied to it different specific names, but the name here given is the one which must be adopted for it and retained, as it was the first applied. As the genus *cimex* of the older authors has required revision, and as it has been reduced to a number of lesser divisions, now known as genera, it becomes necessary to refer this species to the genus *Gonocerus*, which was first separated by Satreille; its proper name thus becomes *Gonocerus tristis*. The common name by which this insect is generally known is "Squash Bug." Dr. Harris, in his "treatise on the insects of New England injurious to vegetation," gives a very full account of its history and habits, as well as the best means of guarding against its ravages. As the book is not generally accessible to readers it may not be improper to quote from it. He says: "About the last of October Squash Bugs desert the plants upon which they have lived during the summer, and conceal themselves in crevices of walls and fences, and other places of security, where they pass the winter in a torpid state. On the return of warm weather they issue from their winter quarters, and when the vines of the Squash have put forth a few rough leaves, the bugs meet beneath their shelter, pair, and immediately after begin to lay their eggs. This usually happens about the last of June, or beginning of July, at which time, by carefully examining the vines, we shall find the insects on the ground or on the stems of the vines close to the ground, from which they are hardly to be distinguished on account of their dusky color. This is the place where they generally remain during the day, apparently to escape observation; but at night they leave the ground, get beneath the leaves and lay their eggs in patches, fastening them with a gummy substance to the under sides of the leaves." These eggs somewhat resemble small beads, flattened on two sides, and of an orange color, very shining. The eggs soon hatch and disclose a small, six-legged, rather oval, pale grayish bug, with two jointed antennae projecting from the head, while beneath the head is a rather long proboscis; with this latter instrument they do the injury to the vines by pricking the leaves and imbibing the sap. As they increase in size they become yellowish beneath, and seem more broadly oval in form; at this time two little plate-like pieces will be observed, one on each side, just behind the thorax; these are the rudiments of the future wing-covers. After having changed their skin for the last time, they are a little less than two-thirds of an inch long; the ground color is a dirty yellow, which appears grayish brown on account of the numerous brown points which cover the surface of their bodies above; underneath the punctures are not so numerous, and the surface appears more yellowish. In form they appear rather triangular in front, while behind the body is oval, rather flat above, but very convex beneath. When squeezed they give forth a pungent odor, which some compare to that of a ripe pear.

"In order to prevent the ravages of these insects, they should be sought and killed when they are about to lay their eggs; and if any escape our observation at this time, their eggs may be easily found and crushed. With this view the vines must be visited daily during the early part of their growth, and must be carefully examined for the bugs and their eggs. A very short time spent in this way, in the proper season, will save a great deal of vexation and disappointment afterwards. If this precaution be neglected or deferred till the vines have begun to spread, it will be exceedingly difficult to exterminate the insects on account of their numbers; and if at this time dry weather should prevail, the vines will suffer so much from the bugs and drought together, as to produce but little if any fruit. Whatever contributes to bring forward the plants rapidly, and to promote the vigor and luxuriance of their foliage, renders them less liable to suffer by the exhausting punctures of the young bugs. Water drained from a cow yard, and similar prepara-

tions have, with this intent, been applied with benefit." P. R. UHLER.

Chester White Pigs.

Editor of American Farmer:

Observing in the last issue of American Farmer, some reference to an article in the Country Gentleman, which traces the origin of this breed to Berkshires, I thought it might be well to state, that this is *not* the prevailing opinion in Chester county. Indeed the assertion disproves itself, as in reciting the "*Points*," the same article states, "that the least *spot*, or approach to a *sandy color*, indicates a grade animal."

If the present Chesters are descended from the Berkshires, I hold it would have been entirely impossible to have *bred out*, within this period, the "black spots," or "approach to a sandy color." It would take a very long period indeed to do this, if it were possible at all. The dissimilarity between a white color and a black one, is too great, to establish a breed from the cross, without occasionally showing spots, or sandy color, on the hair or skin, as the *Pure Chesters* do not show either, and this is correctly stated to be one of their "points," the inference is that they are *not* related to the Berkshires and most evidently not *founded* on that breed.

In an article in the "Country Gentleman," page 268 of last volume, 1861, I expressed the opinion, that the origin of the Chester County Breed of Hogs is traceable very clearly to a pair of Bedfordshire Hogs, brought into Chester county from England, by Capt. James Jeffries, many years before the Berkshires were heard of in the United States.

These were white, purely so, and very similar in configuration to the present Chester County Hog. The description of the Bedfords, also in English stock books, shows strong similarity. By crossing these with the best stock of the country, and breeding carefully for a series of years, have arisen the present "White Chesters," undoubtedly the best breed now in the country, *combining with* large size and good figure, the easy fattening and other desirable qualities of the Berkshires, Suffolks, and other small breeds.

I have sent pure Chester County Pigs from Maine to Louisiana, and from the Atlantic States to West of the Mississippi, and have now applications from Kansas and points on the overland route to California.

Wherever they have gone, they have been found to differ in many particulars from any other breed, in the respective localities, and can certainly now be called a *distinct breed*, with well established points and peculiarities, which are transmitted to their offspring.

They vary occasionally like Durhams and other breeds of cattle, all not having equally the same desired points of excellence, but when carefully selected the progeny will be as certain to prove the well known axiom, "that like produces like," as any other distinct breed of animals. PASCHALL MORRIS,

Philadelphia.

PIKESVILLE, MD., Aug. 7th, 1861.

Mr. Editor,—In the number of the American Farmer for the present month, I notice a communication from a brother farmer in reference to what he calls "Cat Claw Briars," commonly called "Dewberry Vines."

Having been troubled myself with this plant, and having been quite successful in eradicating it, by your permission I will give your correspondent the method we have adopted.

Plough the ground in the fall or during the winter, and put it in corn the next spring; work it *thoroughly* as long as it will bear it; plough it up again the following spring, and let it remain till August; then plough again and put it in wheat in September. After each ploughing and harrowing, gather up as many of the roots as can be found on the surface, and burn them.

If one course of such treatment should not prove successful, try another.

Should the soil need the application of lime, give it a suitable dressing of this indispensable article when it is ploughed up for corn. Put it on the surface after ploughing, and harrow it in well just before planting. By pursuing this plan, I think your friend will soon get rid of his briars.

Yours, A SUBSCRIBER.

Bad Cultivation.

We regret very deeply to see so much of what we call BAD CULTIVATION. We have repeatedly urged orchardists and vine growers *never* to plant vegetables of any kind, or any crop whatever, *between* the rows of trees or vines; and yet we see those who ought to know better, planting corn, squashes and root crops between fruit trees and vines—even when they can see plainly that the crop thus grown is not as good as if grown by itself, and when they can see also that both *trees* and *vines* are injured by such foolish acts. A little reflection should teach every cultivator that a tree or vine that receives a check in its first years will never be as good or fruitful as it would have been if not thus injured, and no trees or vines will ever do well when thus crowded with other crops.—*Cal. Farmer.*

Rye for Sheep.

Rye is one of the most valuable of the green feeds for sheep. A friend of ours, an amateur farmer who has his means locked up in real estate, but who is determined to make it pay his expenses in spite of the hard times for all real estate speculators, enclosed four hundred acres, which he rents out on shares, the most of which has been cultivated in corn since the crash of 1857. Beginning to fear that his third of the corn crop would not pay his taxes on some thousands of acres of wild land, with his other expenses, applied to his arithmetic, which convinced him that a thousand good mutton sheep would help him out; so, after the corn was laid by, he persuaded one of his tenants to allow him to sow some thirty acres of rye among the corn. His thousand sheep were purchased in August, herded wherever he could find feed until the corn was ripe, when they were turned on the young rye, and which was their principal feed until the first of June, when it was turned under and planted to corn. A portion of the crop was well fed down, but had it not been for the standing corn stalks a respectable crop could have been harvested from a part of the field. Here was the large part of the feed of a thousand sheep for eight months costing twelve dollars for seed and about the same for labor, and returning the land in far better condition than it was before, no doubt to the extent of the seed and labor. We have never seen a lot of sheep and lambs at this season in so good condition as this rye fed flock.

The flock is now on the prairie, and will remain there until his meadow is ready to turn into, when the rye pasture will be repeated. He will clear at least fifteen hundred dollars the first year in this operation, the result of brains in farming. *Illinois Farmer.*

Good Seed—Early Wheat.

"What you sow, that shall you also reap," is as true in agriculture as in morals. It was once thought, and sustained by high authority, that imperfectly ripened wheat, if it would germinate, was as good as any for seed—and even recommended as better than good, plump kernels, as more seeds were contained in a bushel. Experience proves this notion fallacious. We may as well expect a full-sized Morgan horse from a Spanish jackass, as a good crop of wheat from imperfect seed. *To produce the best, we must propagate from the best.* (*a*)

In England, the farmers take the sheaves and whip them gently over a stone, when the best and earliest ripened kernels will fall out, which they take for seed. A better method is to go through the field and select the earliest ripened heads for seed, which will soon produce an earlier variety than the original stock. Such seed will also produce a crop free from smut. Sowing poor, half-ripened, imperfect seed, is sowing smut and disappointment. It might seem that it would be an endless task to gather enough early heads for seed, but it requires but two or three years to change the variety, and have seed enough and to spare.

A wheat known in Scotland as the Hopetown wheat, and deemed an excellent and prolific variety, owes its origin to an accidental circumstance—an observing farmer having remarked a very superior ear, from which he picked out ninety-nine kernels, and from their product came this celebrated variety.

To show the rapidity with which such seed may multiply, we give an instance. A farmer in Cambridgeshire, England, in 1840, gathered eighteen very fine ears, the proceeds of which filled a common wine glass. These seeds he planted the following autumn, and produced one peck. This was planted the following autumn, and produced seven bushels and one peck, and this produced one hundred and eight bushels and two pecks, which was planted in 1843, and produced one thousand eight hundred and sixty-eight bushels. This was the increase of eighteen heads of wheat in four years.

Another farmer planted thirty kernels in 1839, which produced fourteen and three-fourths ounces; this was sown, and produced one bushel and one peck; this produced forty-five bushels; and this, in 1841, produced five hundred and thirty-seven bushels.

It will thus be seen that the task of gathering the earliest ripened heads, and thus producing an early variety, is not great; and farmers will be well paid for the trouble. They will get a variety that can be sowed late enough to escape the fly, and that will still ripen early enough to escape the rust. Try it, and give us the result.—*Ohio Farmer.*

(*a*) The leading idea embodied in this paragraph is one which cannot be too often enforced. Farmers and horticulturists are far too indifferent to the quality of the seed which they intend to sow. Not only is this true in regard to the variety, but also as respects the development of the seed itself. We do not feel quite sure, however, that the best and plumpest kernels are always the best seed. We know good farmers who like to get their seed wheat from thin, poor land, where the grain is light and the kernels, though

of good length, are deficient in plumpness—in other words, deficient in starch. No one expects a Morgan horse from a Spanish jack, but we may obtain a good colt from a well bred stallion that is not in high condition. So it is *possible* that we may obtain excellent wheat from seed, of a good variety, that is not itself as fully developed as it would be under the best culture. Our excellent contemporary says: "Experience has proved this notion fallacious." Perhaps so. But if it has, the facts have escaped our observation, and we should be glad to have them brought forward. This is the question: will seed wheat of a particular variety, say Soules for instance, that has been produced on good land, and the kernels of which are large and plump, produce a better crop than seed of the same variety grown on poor land, and the kernels of which are small and thin?

We confess to a doubt on this point. As we have said before, there are good and experienced farmers who prefer to get their seed wheat from poor, thin land, believing that when sown on richer and stronger soil it will produce a better and earlier crop. We are inclined to think they are right, but do not feel certain on the point. Mr. S. Taylor, of England, for many years a large farmer, used to prefer the thinnest wheat for seed. He says he has seen "the most beautiful samples of wheat produced from seed of the most ordinary description." On the other hand, Morton's Cyclopædia of Agriculture advocates similar views to those of the Ohio Farmer.—*Genesee Farmer.*

"No Tools to Lend."

These words, inscribed on the door of a farmer's tool house, recently caught our eye, and furnished a ready theme for meditation. Borrowing is an ancient and evil custom, the fruitful source of many troubles. In the ruder stages of civilization there might have been greater necessity for borrowing than now; but as the world progresses there can be less and less need for it. The tendency of cultivated humanity is to independent action—the tendency of barbarism is to a servile obligation. The more educated a community, the less they borrow, and consequently the more the borrowing element predominates, the greater their degradation. There are several kinds of borrowers at the present day. There are careful and careless—the slack and the prompt—those who expect to pay for the privilege, and those who don't—those who help themselves without permission, and those who forget to return. The careful, prompt, paying borrower is usually a welcome visitor. It is a pleasure to lend to such a man. This class know how to appreciate a favor, and it is of those that Solomon spoke when he said 'the borrower is a servant of the lender.' But there is a class to whom the lender is a servant, a degenerate class of borrowers, always to be dreaded. They wear a fair smooth face to begin with, and a mean, sneaking face at the end. They take the precious property of another, and subject it to rougher usage and severer strain than does the owner—The chances are that the article is returned in a broken or damaged condition. A man who can misuse a borrowed thing, seldom has delicacy enough to make amends for an injury. Thus insult is added to injury, and if complaints arise, neighbors often become enemies. That such are frequent, final results of borrowing, any one familiar with social life knows.

At the farm house where the above inscription referred to was limned there may have been peculiar reasons for it. Of these reasons we know nothing, and have no desire to. But our sympathies, quickened by trials in this lending line, have led us to recall cases that may have been real. For example, farmer A. keeps all sorts of tools, neat, bright, and in perfect order. *He* prides himself on having tools, and sacrifices to his pleasures to save money enough to buy and pay for them. He has neighbors who are unable or too stingy to buy, and so they live by borrowing, and making old apologies for tools answer instead. They can appreciate good tools, and are willing to save time in using them as well as anybody, and they never think about the propriety of remuneration.

Farmer A. buys a new corn planter, and the season being backward, several neighbors are behind hand in planting, and apply for the use of the machine. The implement cost money: the owner never expected to buy another, handles it himself carefully, and reluctantly loans it. Some day after, when farmer A. wants to use his machine, he has to hunt it up among his neighbors, and finds it dirty, unhoused, a nut lost off, and a wooden linch pin supplying the place of the appropriate iron one. As it has been used by several individuals, each throws the blame of damage upon the other, coolly leaving the owner to pocket the loss and its injury.

Again farmer A. gets a mowing machine, and puts in running order some rainy day before the time of using. Soon after a neighboring farmer comes all prepared with his team, and wants to try it in his home lot, intimating that he thinks of buying when he can decide upon its merits.

The machine is allowed to depart, and finally returned by the borrower without thanks or offering, but with the cool impudence that it wouldn't do its work. On examination the knives are found gapped and marked by the sticks and bricks through which it has run, and the loss of an important screw is a key to the mystery. Other cases might be enumerated. Suffice it to say there are well-off farmers in almost every town, who for years have depended upon less opulent neighbors for ploughs, rakes, forks and grindstones. These things ought not to be. Every tub should stand or fall upon its own bottom. It is neither charity or religion to lend to rich men without remuneration. A man's tools are property, and like money are entitled to security and pay. We believe more and more in the sage advice to young men that Shakespeare put into the mouth of Polonius in the play of Hamlet:—

'Neither a borrower or a lender be,
For loan oft loses both itself and friend.
And borrowing dulls the edge of husbandry.'

—*Country Gentleman.*

The Wire Worm.

Messrs. Editors: Last September I ploughed a piece of bound out-pasture ground. A part of it was a clay-colored, sandy loam, the rest a damp, black soil. Last May it was ploughed again, dunged in the hill and planted with corn. The wire worms destroyed every grain planted in the black soil, and left that planted on the light colored soil unmolested. The wire worm is the most insidious enemy to the corn crop on a black soil, that we have to contend with. I have found, after many year's experience, that corn planted upon a light colored porous soil, is not generally molested with these unwelcome pests, but when planted upon a black, damp soil, if it comes up at all, it shows the signs of incurable disease, and premature decay, unaccountable to the inexperienced cultivator till he examines the seed and finds one or more of these underground depredators perforating and fattening upon the seed, and destroying its vitality. It is a matter of importance that black soil should be thoroughly drained before it is planted.

I made a great mistake in ploughing my land the previous fall; as I not only lost the labor of the fall but brought a greedy set of worms to the surface to devour the seed put in by the spring ploughing. Land designed for corn and that is subject to wire worms, ought never to be ploughed in the fall previous to planting, as these insects naturally incline to the surface, where they make an attack upon the seed as soon as planted. After many trials of fall ploughing, on different kinds of soil I am wholly in favor of spring ploughing for corn. The ploughing ought to be done as soon as possible after the ground is ploughed, before the worms have time to shift their places from the roots of the grass to the planted seed. Corn planted upon the newly turned sod, will often escape the ravages of the wire worms, but if the same piece of ground is to be planted the second year, by all means plant anything rather than corn, for the worms multiply rapidly on ploughing the ground. The wire worms prevail most in a sour, red-oak soil, and we might reasonably suppose that the application of lime and other alkalies to the soil would prove an antidote to or preventative of their procreation. How salt would operate on them is beyond my experience, but it has been sure death to my asparagus in two applications. Whether there is any affinity between wire worms and asparagus, or animal life and vegetable life, is a problem. I have found, after drainage, the application of sand, fine gravel and high manuring to tenacious soils, is the best *vermifuge* and fertilizer which I have tried.

SILAS BROWN.

North Wilmington, July, 1861.

It has been asserted that six bushels of salt, to the acre has killed wire worms, or driven them away; but we have never been able to find that such assertions rest on anything better than moonshine. [Eds.]—*Boston Cultivator.*

Lime and Salt Compost.

The mixing of lime and salt is a simple process—the principle conditions to observe are not to use salt in such a quantity as to render the manure injurious to the crop to which it is to be applied. Having determined on the quantity of lime to be applied per acre, calculate the quantity of salt necessary to add to the lime, which should not exceed four hundred weight to the acre. The salt may be dissolved in water before being mixed with the lime shells—the compost turned over once or twice, and, if convenient, earth or peat added. The action of the lime and salt is to bring the salt in a caustic state, and the lime is converted into the chloride of calcium. The compost is a valuable dressing for wheat, oats, clover, &c., and when intended for these crops, the compost should be formed two or three months before the period of application. The action of the compost is not understood to be powerful in destroying insect life. When applied for this purpose it should be spread on the soil in the beginning of autumn, and mixed with the soil by the use of the grubber, &c. We may

mention that any kind of inferior salt which can be obtained cheap, may be used for forming the compost. A better substance for destroying insects is gas lime. The quantity of gas lime to apply varies with the texture of the soil; but four tons an acre is generally sufficient. This should be applied hot from the gas works and spread evenly over the surface. If applied during the winter to grass lands, the improved verdure of the field will generally show within a few weeks the effects of the top-dressing. If you apply it to land intended for turnips, it should be applied immediately upon the removal of the cereal crop, and grubbers and harrows used to incorporate it with the soil.—*North British Agriculturist.*

Gas lime should be used with caution always, as the growing crop is liable to be destroyed by it. It is better to apply it on the sod the year before breaking up.—*Ed. of American Farmer.*

Growth of Clover.

Dr. Voelcker, Chemist to the Royal Agricultural Society of England, made a few years since a number of very accurate and original experiments on the growth of red clover; and from the details of the results, as published in the society's journal, we condense the following for the consideration of our readers.

"We are far from asserting," (remarks the Professor) "that there is evidence enough to show that the failure of clover, when grown too frequently on the same land, is altogether due to the want of a sufficient supply of certain organic compounds in the soil. At the same time, we think that the facts of agricultural and horticultural practice, as well as the evidence of direct experiment, must lead to the conclusion, that the view that the organic compounds of the soil are only valuable to plants as a source of carbonic acid requires modification. It is, indeed, probable, that some plants derive a considerable amount of their substance from carbon compounds other than carbonic acid, and that others depend for their carbon mainly, if not exclusively, upon carbonic acid."

Such crops as, in the course of cultivation, are subjected to pretty natural conditions of growth, and which accumulate the greater portion of their substance during the period at which the sun's rays are known to be most powerful in influencing the decomposition of carbonic acid by plants appear to depend chiefly on that source for their carbon. Those on the other hand, which are grown under somewhat abnormal conditions, and which store up a large amount of succulent products of a comparatively low degree of elaboration, are probably partly dependent on the carbon compounds yielded by the soil. The leguminous again, though, coming generally more within the former than the latter category, still seem to be dependent, for luxuriant growth, more or less upon a supply within the soil of complex organic compounds.

It would appear, however, that whatever may be the precise result to which investigation may lead, in regard to the questions here involved, it may, at any rate, be pretty safely affirmed, that we shall not arrive at the true explanation of the phenomena upon which depend some of the most striking advantages of a rotation of crops, until we are better able than at present, to define the relations of the different crops to the different sources of carbon and of nitrogen.

The practical conclusions from this interesting enquiry may be very briefly stated:—

When land is not what is called "clover sick," the crop of clover may frequently be increased by top dressings of manure containing potash, and super-phosphate of lime; but the high price of potash, and the uncertainty of the action of manures upon the crop, render the application of artificial manures for clover a practice of doubtful economy.

When the land is what is called "clover sick" none of the ordinary manures, whether artificial or natural, can be relied upon to secure a crop.

So far as our present knowledge goes, the only means of insuring a good crop of red clover is to allow some years to elapse before repeating the crop upon the same land.—*Ex.*

Salt for Swine.

A correspondent of the Annales de Landwirthschaft states some interesting experiments to test the use of salt in fattening swine. He selected two pairs of barrow hogs, weighing 200 lbs. apiece. One pair received with their daily allowance of food two ounces of salt; the other pair, similarly fed, none. In the coarse of a week, it was easily seen that the salted pair had a much stronger appetite than the others, and after a fortnight the salt was increased to two ounces apiece. After four months the weight of the salted hogs was 350 lbs. apiece, while that of the unsalted, five weeks later, reached only 300 lbs. This experiment was repeated with almost precisely the same results. The author feeds young pigs, according to their age, a quarter to one ounce daily, breeding sows very little during pregnancy, and during the heat of summer withholds it in a great degree from all, as it induces thirst, and liability to disease.

Planting Evergreens in the Fall.

[*The Gardener's Monthly* makes the following notes about planting Evergreens in the fall:]

"The latter end of August is one of the best seasons of the year to transplant evergreens. The young growth of the past season has got pretty well hardened, so as to permit of but very little evaporation—and the earth being warm, new roots push with great rapidity, and the tree becomes established in the ground before cold autumn winds begin. The chief difficulty is that the soil is usually very dry, which prevents much speed with the operation; and the weather being generally very warm, the trees have to be planted in the ground almost as fast as taken up, so that it is not safe to bring them from a distance. It is as well, therefore, to make all ready in anticipation of a rain, when no time may be lost in having the work pushed through. Should a spell of dry weather ensue—which in September or October is very likely—one good watering should be given, sufficient to soak well through the soil and well about the roots. A basin should be made to keep the water from running away from the spot, and to assist its soaking in. After being well watered, the loose soil should be drawn in lightly over the watered soil, which will then aid in preventing the water from soon drying out again."

The Barometer.

Too much is usually expected from everything new. The barometer has been much lauded of late, as a sure indicator of the state of the weather; but the farmer who places implicit reliance on its indications, will surely be disappointed. To the farmer who is able to have one, I would say, buy it. It will prove a valuable aid to you in judging of the state of the weather. For several years I have watched its results with reference to the farmer, but my conclusions are somewhat different from those of published accounts. The following are a few of them:

If I see the barometer falling and the sky is overcast, I do not expect good hay weather. Although it may not rain, it rarely clears away under such circumstances. If I see the barometer falling rapidly, I expect to see rain, or wind, or both. I saved a couple of tons of hay the last summer from a smart shower by a forewarning of this kind, besides notifying my nearest neighbor of the same thing. When I see the barometer rising rapidly, no matter what the appearance of the sky may be, I am quite sure there will be no rain, and I can safely go to mowing in the shade of a thick cloud, while my neighbors are in doubt. This I regard as the most valuable practical point to the farmer. On a lowering day the farmer knows that if he should mow down several tons of hay, he might lose many dollars by the operation. But if it should clear away, his several tons of grass already mown will be in fine condition for the barn before another rain.

I have noticed showers when the barometer was high, without any change whatever. The farmer cannot expect a plow, however well constructed, to go without a team, nor must he expect too much from the barometer.—*Dr. True's Address.*

The Horse when Dead.

Dr. Playfair the distinguished chemist, a short time since gave an estimate of the value of a dead horse. It seems that in London, the average weight of those slaughtered is about 950 lbs; the average value about 46 shillings. This weight and the chief purpose to which the different parts are applied, and their value, may be stated as follows:

	lbs.		
Hair	1½	8d to 1s, a lb	Hair cloth, &c.
Hide	30	8s	Leather.
Tendons	6		Glue.
Flesh	224	boiled, 28s	Dog's meat, &c.
Blood	60		Prussiate of Potash, &c.
Heart and Tongue			A mystery.
Intestines	80		Covering Sausages, &c.
Fat	20	3s. 4d	
Bones	160	4s. 6d. per cwt.	Knife handles, &c.
Hoofs	6	8s. to 10s, per cwt.	Buttons, &c.
Shoes	5	2s. to 10s. per cwt.	Old Iron.

☞ The sale of Jonas Webb's South Down sheep came off, according to advertisement, on the 10th ult. We learn by the Mark-Lane Express, that the whole number of sheep sold was 968, viz: 99 two-year-old and aged rams at £30, 16*s*, 8*d*. each, £3,052 7*s*.; 110 shearling rams, £24 12*s*. 9*d*. each, £2,710 1*s*.; 190 shearling ewes, £10, 12*s*. 5*d*. each, £2, 113 19.; 105 two-year- old ewes, £7 15*s*. each, £813 15*s*.; and 455 older ewes, £4, 14*s*. 2*d*. each, £,142; total, £10, 922. The Express observes—"It was the greatest sale of South Down sheep ever known, and it honestly deserved to be such; while at the same time we more than doubt if there will ever be such another. This may not, perhaps, depend upon the *personal* repute of Jonas Webb alone, for the signs of the times all tend to assure us of a growing feeling in favor of other breeds." We are glad to see that some of our own countrymen have purchased some of the best sheep in the flock. The highest-priced ram, No. 89, was bid off for Mr. J. C. Taylor, of Holm Dell, New York, at 260 guineas. Mr. Taylor bought one other ram at 55 guineas, and also bought several ewes.

Mr. Thorne, of New York, showed his intention of keeping up the high reputation which his flock has already attained, by purchasing some of the best ewes. He was not in need of a ram, as the one he purchased of Mr. Weeb last year at a cost of upwards of $1100, is still in service at his farm.

The Value of Indian Corn.

For the following interesting information in regard to this king of food, we are indebted to Hunt's Merchant's Magagine:

By those who do not know, or are too scientific to profit by the experience of nations of men and herds of fat cattle, Indian corn, rice, buckwheat, etc., are only considered good fodder. Leibig states that if we were subject to the same degree of cold as the Somoiedes, we should be able to consume the half of a calf and a dozen candles at a single meal. During excessive fatigue in low temperature, wheat flour fails to sustain the system. This is owing to a deficiency in the elements necessary to supply animal heat, and the strong desire for oleaginous substances, under these circumstances, has led to the belief that animal food is necessary to the human support. But late scientific experiments have led to better acquaintance with the habits of the North American Indians, and show that vegetable oil answers the same purpose as animal food; that one pound of parched Indian corn, or an equal quantity of corn meal, made into bread, is more than equivalent to two pounds of fat meat.

Meal from Indian corn, contains more than four times as much oleaginous matter as wheat flour; more starch, and is consequently capable of producing more sugar though less glutin; in other important compounds it contains nearly as much nitrogenous material. The combination of alimentary compounds in Indian corn renders it alone the mixed diet capable of sustaining man under the more extraordinary circumstances. In it there is a natural coalescence of elementary principles which constitute the basis of organic life, that exists in no other vegetable production. In ultimate composition, in nutritious properties, in digestibility, and in its adaptation to the various necessities of animal life in the different climates of the earth, corn meal is capable of supplying more of the absolute want of the adult human system, than any other single substance in nature.

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Zell & Sons, Peter—Guanoes and Fertilizers.

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APPLES—standard and dwarf; Apricots; Almonds; Cherries; Plums; Figs, &c.

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STRAWBERRIES—Triomphe de Gand; Vicomtesse Hericurt de Thury; Seedling Eliza; Victoria; Excellente; Jucunda; Downer's; Hooker; Feast's Fillmore; Wilson's Albany; Wonderful; Wizard of the North, &c, by the dozen, 100 or 1000.

CURRANTS—Victoria; Red and White Grape; Red and White Dutch; La Versaillaise; Knights Early Red; Champagne, &c.

GOOSEBERRIES—Large English varieties; Blackberries, Lawton, Dorchesters; Raspberries, &c.

Rhubarb; Asparagus Roots; Chinese Yams, &c.

Fruit Tree Stocks; Pear; Quince; Mazzard; Apple; Manetti, &c.

Evergreen; Ornamental Trees; Flowering Shrubs; Climbers, &c.

Fortune's exquisite double flowering Peaches, Crimson, White, Rose Carnation and Camellia flowered—these are among the most beautiful of spring flowering trees.

ROSES—a very extensive and complete collection, embracing all the standard sorts, with all novelties.

Phloxes; Dahlias; Delphineums; Pæonias, &c.

BULBOUS ROOTS—direct from Holland—Double and Single Hyacinths, Tulips, Ranunculus, Anemonies, Lilies, &c.

From the facilities now offered of sending articles by mail, Grape Vines, Strawberries, and all small things, can in that way be forwarded any distance with perfect safety.

All articles sold as low as any reliable nurseryman.

Catalogues mailed on application.

sept JOHN SAUL, Washington City, D. C.

MORRIS' NURSERIES.

Our Wholesale Catalogue, with prices for fall of 1861, is now ready for distribution, and will be sent to all Parties applying and enclosing a one cent postage stamp.

The stock of Trees for the fall trade is large, fine and thrifty, and comprises every article kept in a first class establishment, and are offered at reduced prices.

We would invite particular attention to the following articles, selected from our list—the stock is large, and we think prices will compare favorably with any other reliable establishment.

Currants, $20 to $40 per 1000.
Gooseberries, $25 per 1000.
Rhubarb, $50 per 1000.
Lawton Blackberries, $15 per 1000.
Asparagus, giant, $2 per 100, $15 per 1000.
Apple Trees, 6 to 9 feet, selected, $100 per 1000.
" " 5 to 7 feet, good trees, $75 per 1000.
Peach Trees, 5 to 7 feet, $60 per 1000.
Spanish Chestnuts, 1 year, extra, $25 per 1000.
Sugar Maple, twice trspl, $12 to $35 per 1000.

A large assortment of Seedling Evergreens, 2 and 3 years old, from 6 to 12 inches, very low, &c., &c., &c.

Address J. L. DARLINGTON & CO.
sept-3t West Chester, Pa.

CHESTER COUNTY PIGS.

The undersigned is now receiving orders for his fall delivery of PURE CHESTER COUNTY PIGS, which will be ready for shipment about 1st of next month, in pairs not akin. References as to quality, to purchasers in all sections of the country.

PASCHALL MORRIS,
Agricultural and Seed Warehouse,
sept-tf 1120 Market street, Philadelphia.

Harmony Grove Nurseries.

ISAAC JACKSON & CO.

Offer for sale this fall:
50,000 APPLE TREES,
100,000 PEACH TREES,
5,000 PEAR TREES, st. and dwf.
5,000 CHERRY TREES, st. and dwf.
Strawberry, Raspberry, Gooseberry, Currant, Asparagus, Grape, Blackberry, by the million.
Osage Orange, Rhubarb, Apple Seedling, by the acre.
Please address
ISAAC JACKSON & CO.,
sept-2t West Grove, Chester County, Pa.

DAVID J. GRISCOM,

EVERGREEN NURSERY,

WOODBURY, NEW JERSEY,

Offers for autumn planting the largest and finest stock of PEACH, APPLE, PEAR and other FRUIT TREES and SMALL FRUITS, he has ever grown. His stock of Evergreens, Shade Trees, Vines, Roots, &c., is as heretofore, very extensive.

sp-2t Prices greatly re'uced. ☞ Send for a Catalogue.

100,000 PEACH TREES

FREE FROM YELLOWS.

We would call especial attention to our Peach Trees, *which we have taken especial pains to have healthy.*

Prices to suit the times.

ISAAC JACKSON & CO.,
sept-2t West Grove, Chester County, Pa.

BRIGHT ON GRAPE CULTURE.

SECOND EDITION.—THIRTY PAGES OF NEW MATTER, with the experience of 1860 and '61, being the most important part of the work. Indispensable to all GRAPE GROWERS. Sent by mail, free of postage, on receipt of price, 50 cents, in stamps. Address,

WILLIAM BRIGHT,
july Box 138 Philadelphia P. O., Pa.

GUANOES

AND

FERTILIZERS.

No. 1 PERUVIAN GUANO,

Direct from Agent's Warehouse.

AA MEXICAN GUANO,

Rich in Phosphates.

Manipulated, American, Navassa and Sombrero Guanoes.

A fine lot of

Boughton Early Seed Wheat,

Ripens two weeks early and escapes the rust.

J. J. & F. Turner's Excelsior,

The most popular fertilizer sold.

BAUGH'S RAW BONE AND DE BURGS,
PHOSPHATE OF LIME,
BONE DUST, BONE ASH,
GROUND PLASTER, &c.

Clover, Timothy and Orchard Grass Seeds.

For sale at lowest market rates, by

PETER ZELL & SONS,

sept-2t Nos. 147 & 9 NORTH HOWARD STREET.

Page's Patent Portable Circular Saw Mill & Page's Horse Power,

AreMachines that no owner of a well appointed farm can afford to be without.

All kinds of timber may be sawed into fencing stuff with little or no waste—there being a gain of more than one-half in the amount of fencing that the same timber will yield when sawed over the old style of split rails, to say nothing of the increased neatness and durability of the fence thus made.

All the timber necessary for farm purposes, for the building of barns, barracks, cattle sheds, fences, &c., can be sawed at odd times, when hands and horses would otherwise be idle, and at an expense so light that the cost of sawing will not exceed the ordinary cost of hauling to and from the old-fashioned saw mills. Our Horse Powers are stronger and will last longer than any others built, and are as well adapted to general farm use as for sawing.

We manufacture also PORTABLE and STATIONARY STEAM ENGINES of various sizes and best workmanship.

Our Portable Engines range from 6 to 27 horse power, and are, as their name imports, strictly portable, capable of being moved from place to place by from 2 to 6 horses. The small sizes are well suited for farm and plantation purposes, to thresh wheat, gin cotton, &c. The larger ones for all the general uses to which steam is applied.

Descriptive catalogues sent to any gentleman who may apply. Address,

mh1-tf GEORGE PAGE & CO., BALTIMORE, MD.

HENRY GIBSON,

(Late BURNS, RUSSELL & GIBSON,)

MANUFACTURERS OF DRAIN TILE,

LOCUST POINT, BALTIMORE, Maryland.

All Letters and Orders must be addressed to the CARE of E. G. LIND, Architect, CORNER OF CHARLES AND FAYETTE STREETS, when they will secure prompt attention.

2 inch Round Tile	$11 per 1000 feet.	4 inch Round Tile	$30 per 1000 feet.
3 " "	17 " "	4 " " 1-6 long	34 " "

COLLARS EXTRA.

4 inch Round Tile, 2 feet long, with Collar, 9 cts. per foot—5½ inch Round Tile, 2 feet long, with Collar, 13c per foot.

Particulars respecting large Socket Pipes and Sole Tiles will be forwarded on application as above.

All these Pipes are made of the finest clay by skilful and experienced workmen; they are clean in the bore, and so thoroughly burnt as to be impervious to frost, and will bear comparison in quality and strength to the best goods manufactured in the world: a premium for which was awarded me at the Norfolk Show. dec-1y

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CHEMICALS, DRUGS, &c. used for Agricultural Purposes.

NITRATE OF SODA,
SULPHATE OF SODA & SALT-CAKE,
SULPHATE OF AMMONIA,
SAL-AMMONIAC,
POT-ASH, SODA-ASH,
CARBONATE OF AMMONIA,
OIL VITRIOL, &c., &c.

For sale, wholesale and retail, by

R. J. BAKER,

ap-1y 36 *South Charles-st., Baltimore.*

JAMES BAYNES. JOHN B. BAYNES.

JAMES BAYNES & SON,

WOOL DEALERS,

HOLLINGSWORTH STREET,

Near Lombard, between Calvert and Light sts.,

BALTIMORE.

REFERENCES:—B. Deford & Sons, Baltimore; Wethered Brothers, Baltimore; Benj. Bullock & Sons, Philadelphia; H. Robinson & Co., Philadelphia; J. W. Stitt & Co., Philadelphia; Wm. K. Strong, New York; C. J. & F W. Coggill, New York; G. W. Bond & Son, Boston; T. B Townsend & Son, Boston; Springer Harbaugh, Pittsburg Pa.; A. D. Bullock & Co., Cincinnati, Ohio. may

Splendid Stock
OF
DRY GOODS

HAMILTON EASTER & CO.

Invite the attention of persons visiting Baltimore to the large and splendid STOCK OF GOODS in their

NEW MARBLE BUILDING,

Nos. 199, 201 and 203 Baltimore St.

Importing the greater portion of our stock—one of the firm visiting the various European markets twice a year for that purpose—we are prepared to offer to WHOLESALE AND RETAIL PURCHASERS goods of the best class at very low prices, including

Black and Colored Silks
AND
ROBES,
Fine Dress Goods
OF EVERY FABRIC,

Low and Medium Priced Dress Goods,
SHAWLS,
SCARFS,
MANTILLAS
AND CLOAKS,
GLOVES,
HOSIERY,
CRAVATS,
HANDKERCHIEFS, &c.

CHOICE GOODS FOR MEN'S WEAR.

Mourning Goods,
OF EVERY DESCRIPTION.

IRISH LINENS, LINEN GOODS, and articles of every description in the way of

Housekeeping Dry Goods.

☞ ALWAYS ON HAND, such Goods as are required by

Planters and Farmers,
FOR SERVANTS' USE:

Such as Bleached and Brown COTTONS, OSNABURGS, JEANS, LINSEYS, PLAIDS, Fulled Cloths, SATINETS, BLANKETS, &c.

☞ NO DEVIATION FROM FIRST PRICE NAMED FOR ANY ARTICLE.

WHOLESALE ROOMS on second and third floors. ap1-1y

VIRGINIA LAND REGISTRY and Agency Office,
LYNCHBURG, VA.

The undersigned, by request of land sellers, has established in the city of Lynchburg, an AGENCY FOR THE SALE OF LAND, the object of which is to afford facilities both to the seller and purchaser of land. He will keep in his office a LAND REGISTER, containing correct and thorough descriptions of Farms for sale, including quantity, quality, location, price, terms, and all other information essential to be known by one desirous of purchasing. In this way, persons unacquainted with the country, or wishing to purchase, can, without delay, have such a plantation pointed out to them as would suit their wishes, and the purchaser and seller at once be able to meet each other. And, on the other hand, sellers can bring their land to the notice of those directly concerned, without that notoriety which is often unpleasant within itself.

Persons who wish the aid of this office in selling, must give a full and accurate description of their land, in order that a fair and candid representation may be made to the purchaser.

This Agency will be advertised in the most prominent agricultural papers.

All communications must be post paid, and if an answer is required, must be accompanied with a postage stamp, and they will be promptly attended to.

☞ Office at Wm. T. Anderson's, Bridge street, next door to Messrs Irby & Saunders.

ap 1-6t LEYBURN WILKES.

WHEELER & WILSON'S
SEWING MACHINES,

With new improvements, at reduced prices. The Wheeler & Wilson Manufacturing Company, having gained ALL their suits at law with infringing manufacturers of Sewing Machines, propose that the public shall be benefitted thereby, and have accordingly reduced the prices of their Sewing Machines. After this date they will be sold at rates that will pay a fair profit on the cost of manufacture, capital invested, and expense of making sales—such prices as will enable them to make first-class Machines, and, as heretofore, guarantee them in every particular.

NEEDLES, SILK, &c., at reduced prices.

FAIRS OF 1860.

WHEELER & WILSON,

☞ AS USUAL, VICTORIOUS! ☜

AWARDS BY VIRGINIA MECHANICS' INSTITUTE ON

SEWING MACHINES.

To WHEELER & WILSON, 1st Class Premium—Silver Medal.

To the LESTER CO., of Richmond, 2d Class Premium—Diploma

To GROVER & BAKER, 3d Class Premium—Diploma.

ON SEWING MACHINE WORK

1st Premium to WHEELER & WILSON,

2d Premium to the LESTER CO.

W. MERRELL, AGENT,

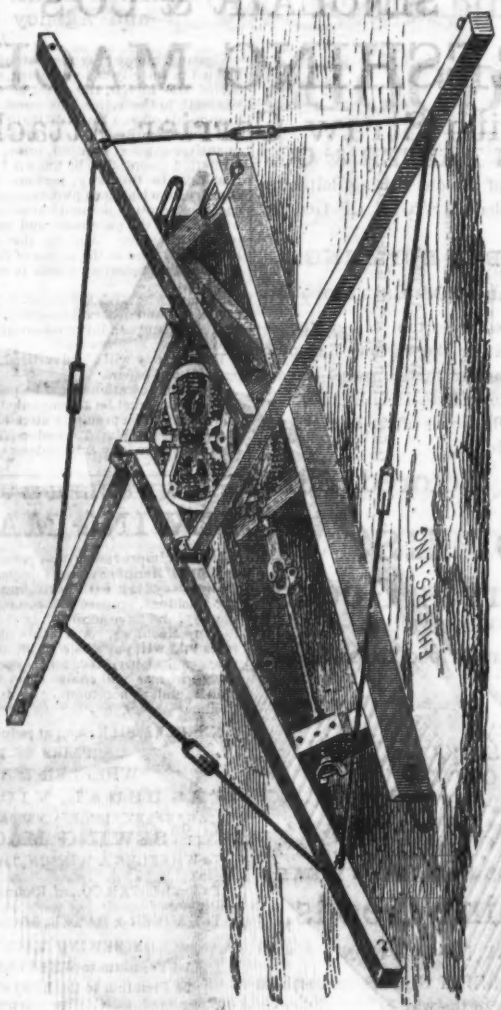
jan-1 205 Baltimore street, Baltimore, Md.

Fruit and Ornamental Trees.
J. L. DARLINGTON & CO.,
Morris Nurseries, West Chester, Pennsylvania,

Call the attention of their friends and customers in the South to their large and fine assortment of *Fruit Trees*, both Standard and Dwarf, also to their very full collection of all the small Fruits. We have all the best Fruits adapted to successful cultivation, comprising the best varieties of Apples, Pears, Peaches, Cherries, Plums, Apricots, Nectarines, Quinces, etc., etc.

☞ Ornamental Trees, both Evergreen and Deciduous of all kinds and sizes can be furnished at reduced prices. We call especial attention to our extensive stock of large and well-shaped Evergreens. For particulars we refer to our Catalogues, which will be furnished gratis to all applicants. Freight paid to Philadelphia on all orders amounting to $5 or over. mar-1y

TRIPLE OR INTERNAL GEAR HORSE POWER.



The figure shows the construction of this very prominent Horse Power. It is simple, strong and durable, and (all things considered) the best Power in use.

Price No. 1, capacity 4 or 6 horses,		$ 75.00
" " 2, " 6 or 8 "		80.00
" " 2, Spur Gear, Horse Power,		110.00
" " 3, " "		140.00
" " 1, Bevel, Gear Power,		110.00
" " 2, " "		125.00

For sale by

R. SINCLAIR, Jr., & CO.

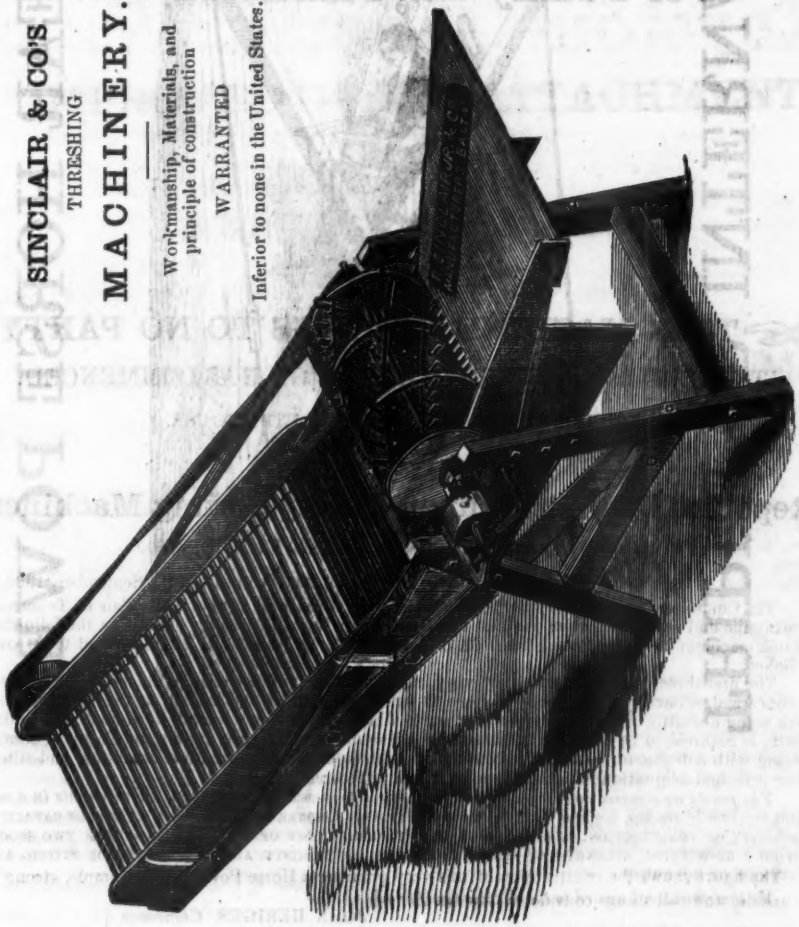
july

No. 62 LIGHT STREET, BALTIMORE.

SINCLAIR & CO'S
THRESHING MACHINE,
With Straw Carrier Attached.

SINCLAIR & CO'S THRESHING MACHINERY.

Workmanship, Materials, and principle of construction WARRANTED Inferior to none in the United States.



Width of Cylinder,	16	20	25	30 inch.
Price complete for Parallel Cylinder,	$55	60	73	85
Price complete for Spiral Cylinder,	60	65	78	90

Ditto without Straw Carrier, $15, 18 & 20 less.

DRIVING BELTS, $12a18, as per length. HORSE REVOLVING and GLEANING RAKES. HARVEST TOOLS of every description.

For sale by

R. SINCLAIR, Jr. & CO.

July No. 62 LIGHT STREET, BALTIMORE.

GROVER & BAKER'S SEWING MACHINES,

For Family and Plantation Use.

☞THIS MACHINE BELONGS TO NO PARTY!

ITS FIELD IS THE WORLD—ITS REIGN HAS COMMENCED.

THE ONLY MACHINE FIT FOR SOUTHERN USE.

Report of Committee upon Family Sewing Machines,

APPOINTED BY THE TENNESSEE STATE FAIR, 1860.

NASHVILLE, Tennessee, 15th September, 1860.

The Committee appointed by the State Bureau of the Seventh Annual State Fair of Tennessee, to examine and mark award for the best Family Sewing Machine, find on exhibition the following named machines in competition: the I. M. Singer, Wheeler & Wilson, A. B. Howe, and the Grover & Baker.

The first three named, although differing in construction and capacity, still, so far as the stitch is concerned, all arrive at the same point, making what is called and known as the *Shuttle Stitch*, each using a shuttle or shuttle and bobbin, on to which all the lower thread, or thread used underneath, is required to be re-spooled. The Shuttle Machine may be used upon some classes of family sewing with a degree of satisfaction: but we conceive from their construction, operation, and stitch, their principal adaptation is to the purposes of manufacturers.

The points we conceive most necessary and important to meet the wide range of requirements in a machine for family sewing, we find more fully combined in the GROVER & BAKER, VIZ: EXTENT OF CAPACITY, SIMPLICITY OF CONSTRUCTION, EASE OF MANAGEMENT, ADVANTAGE OF USING THREAD FROM TWO SPOOLS WITHOUT RE-WINDING, STRENGTH OF WORK, ELASTICITY, DURABILITY AND REGULARITY OF STITCH, AND QUIETNESS OF MOVEMENT.

We therefore mark award to the Grover & Baker.

JOHN HERIGES, *Chairman*,
J. W HORTON,
J. W. WILSON,
C. H. WHITE,
JAMES A. WOODS,
} COMMITTEE.

I HEREBY CERTIFY, that the above is a true copy of the original decision and award of the Committee upon Family Sewing Machines, appointed by the Tennessee State Fair for 1860.

L. P. WILLIAMS, *Secretary Tennessee State Agricultural Bureau.*

☞SEND FOR A CIRCULAR.

GROVER & BAKER Sewing Machine Co.,

nov-1y **181 BALTIMORE STREET, Baltimore.**

PREMIUM

Iron Cylinder Grain Drill,

—WITH THE—

IMPROVED GUANO ATTACHMENT

—AND—

GRASS SEED SOWER.

☞PATENTED AUGUST 17, 1858.☜ MANUFACTURED BY

Bickford & Huffman, Baltimore, Md.

This Drill is universally acknowledged, where it is known, to be the most perfect machine ever invented for sowing all kinds of grain, and every description of Fertilizers in a concentrated form. It is so constructed, with the different sized gear wheels, as to sow any desired quantity of grain, from one to four bushels to the acre. In its arrangement for distributing guano, lime, plaster, ashes, &c. either in a damp or dry state, it differs from and excels all other drills ever before offered to the public, a separate box for these Fertilizers being attached in front of the Grain Box, from which the manure is evenly and perfectly delivered in the tubes, and is deposited with the grain in the drill furrow. This attachment is so constructed to be used either with or without the Grain Drill. In addition to this improvement, we have also attached a Grass Seeder, for sowing grass or Clover Seed broadcast, which may be used either in front or back of the drill tubes.

The proprietors have been engaged in the manufacture of Grain Drills for over ten years, and have been continually making improvements. They now with confidence offer their improved Drill to a discerning public, and warrant it to give entire satisfaction. Reference will be given, on application to the proprietors, to responsible persons, in almost any state in the Union. Hundreds of certificates are in possession of the proprietors, testifying to the superiority of this machine over all others.

Those wishing this article, and one that is universally acknowledged by the farmers of the South, North and West, and by all that have examined it, to be the best ever offered to the public, will bear in mind that unless they order early, may be disappointed, as hundreds were last season, by delay.

PRICES:

9 TUBE DRILL	$90 00	GUANO ATTACHMENT	$25 00
8 " "	85 00	GRASS SEED SOWER	10 00
7 " "	80 00		

☞All orders promptly filled and nformation given by application to

C. F. CORSER,

General Agent for the Southern States.

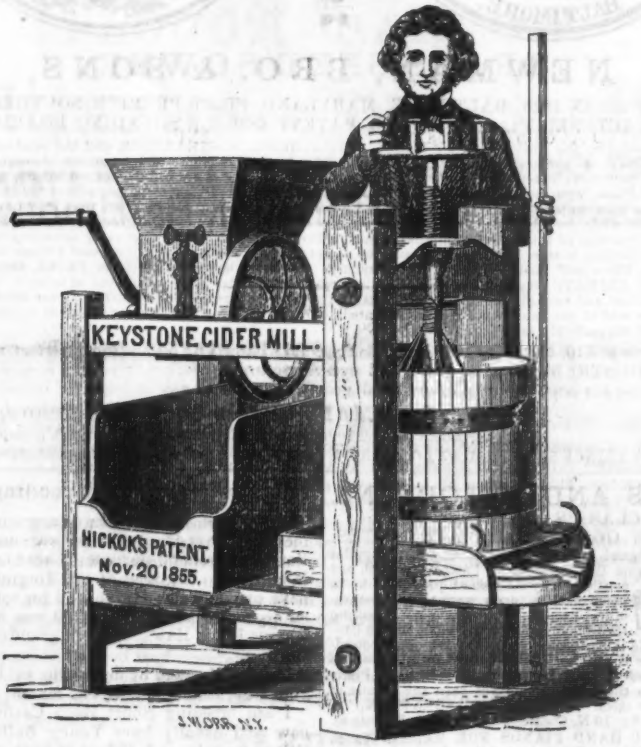
Office, No. 90 S. Charles street, between Pratt and Camden, Baltimore, Md.

july-1y

HICKOK'S

PATENT PORTABLE

Keystone Cider & Wine MILL.



This admirable machine is now ready for the fruit harvest of 1861. It is, if possible, made better than ever before, and well worthy the attention of all Farmers wanting such machines. It

HAS NO SUPERIOR IN THE MARKET,

And is the only machine that will properly grind Grapes.

☞ Orders now received by the manufacturer, payable January 1, 1862. For sale by all respectable dealers and the manufacturer,

W. O. HICKOK, Harrisburg, Pa.

HARRISBURG, March 1, 1861. april-6t

PIANOS.

NEWMAN, BRO. & SONS,

ESTABLISHED IN 1825, BALTIMORE, MARYLAND, FIRST PREMIUM SOUTHERN MANUFACTURED PIANOS, WITH THE PATENT DOUBLE SOUNDING BOARD.

Recommended by the world-renowned Pianist, S. THALBERG, M. STRAKOSCH and the celebrated Violinist, H. VIEUXTEMPS, the greatest living artists in the world—also by Professors and Amateurs throughout the country. These Pianos have taken the *first honors wherever exhibited for competition* over all others, and have been awarded *Five First Premiums* during the Fall of 1859, at the different exhibitions in the various *States* of the Union.

Among the many superior advantages possessed by these instruments over others are that they have a DOUBLE SOUNDING BOARD, for which the Messrs. Newman have received *Letters Patent* from the United States Government. The advantage of this Double Sounding Board is, that they have *greatly increased sounding surface*, in the two distinct sounding boards, (while others have but *one only*,) and hence greatly increased volume and sweetness of sound, and, like a well made Violin, improves by use. They also have the full IRON FRAME, thereby adapting them for ANY CLIMATE, finished in *every style*, from the most elaborate development of taste in the decorative art, to the plainest and most simple style of neatness. (The *internal structure* and finish of all are nearly the same.)

All Pianos sold of our manufacture are warranted for FIVE YEARS—with the privilege of exchanging within six months, if not perfectly satisfactory.

☞ *Factory*, 510, 512, 518 *and* 522 WEST LOMBARD STREET. *Branch Wareroom, No.* 235 BALTIMORE STREET, *near Charles street, sign Miniature Piano.*

Pianos boxed and shipped to all parts of the world. All orders addressed to

NEWMAN, BRO. & SONS, Baltimore, Md.,

Or to our AGENTS in different parts of the country, will meet with prompt attention.

Also, G. O. PRINCE'S celebrated *MELODEONS* for sale at Factory prices—the best manufactured. oct-1y

PIANOS AND MELODEONS.

NUNNS & CLARK'S, AND STEINWAY & SONS' GOLD MEDAL PIANO FORTES.

The undersigned is constantly receiving new supplies of PIANOS from these celebrated Factories, which are considered by competent judges to be in point of tone, touch, workmanship, durability, keeping in tune and *not breaking strings*, superior to any made in the United States. He is constantly receiving the most unbounded expressions of satisfaction and delight from those who have purchased these Instruments—in fact every Piano sent out from these warerooms has been the means of effecting other sales. W. D. BENTEEN,

No. 10 N. Charles-st., and 80 W. Fayette-st.

☞SECOND-HAND PIANOS FOR SALE. Pianos exchanged. MELODEONS from $45 to $200.

ORGAN HARMONIUMS, for large Churches, with 8 stops and two rows of keys, $350.

Particular attention is paid to orders by mail. nov

BONE DUST AND POUDRETTE,

Warranted free from any mixture, having the Bone Dust in its natural or pure state. Fine or Stamped, by the bushel or ton.

POUDRETTE—A superior article and the cheapest Manure in the market, well adapted for Corn or any crop in the drill or hill.

REFERENCES:—John W. Randolph and N. B. Worthington, Baltimore; Thomas S. Mezeek and John Ridout, Annapolis; R. G. Browstor and J. Moull, N. Jersey. The above named practical farmers will testify to its merits.

FACTORY, Wilk street and Harris' Creek, Canton.

ORDERS left at the American Farmer office will be attended to. [d1] THOMAS BAYNES.

Highly Improved Breeding Stock.

After a long and extensive acquaintance with the relative advantages of various breeds of Horses for general purposes, I have no hesitation in breeding altogether of the Morgan stock, and have owned Black Hawk, and his son Post Boy, for eighteen months; the first was sired by the famous Black Hawk, the best grandson of Justin Morgan.

They will stand at my stable, or I would sell Post Boy, having use myself for but one.

I am breeding Short Horn Cattle, and have now and usually have Young Bulls and Bull Calves for sale, and Calves of both sexes nearly thorough-bred, which I will only recommend where suited to go and worthy. Also a well bred Devon Cow and her Heifer, nearly 2 years old. I will sell low.

I raise only the Chester County Hogs (white) and will sell the best Pigs at weaning time or older. They are unquestionably the best Hogs I am acquainted with, and their cross for Pork on native sows, is probably equal to full bred.—They, as well as my Cattle and Horses, have rarely failed to take first premiums in their classes at our Fairs. For particulars address me.

S. W. FICKLIN,

ap-6t *Belmont, near Charlottesville.*

A MAN BY THE NAME OF NORRIS,

THOMAS NORRIS,

KEEPS AN

Agricultural Implement and Seed Store

On Pratt Street, No. 141, in Baltimore City.

He keeps pretty nearly everything in that line. Any kind of a

PLOUGH, HARROW,

Cultivator, Corn Sheller,

WHEAT FAN, RAKE, HOE, &c.

That you may want, you can get them of him. He keeps the best GRUBBING HOES in the whole country; they sell at *a good price*, but are worth the money. He sells a *very superior* AXE, too—he seems to have an aversion to selling indifferent Implements. He sells about the best

Thresher and Cleaner

In the whole country; sold quite a large number this year, and expects to make a *young fortune* on that *one* Machine; he can give you a list of names nearly as long as your arm, of first rate farmers, that bought this year, and all *perfectly delighted*. He sells *first rate* plain THRESHERS, too, and the *very best*

HORSE POWERS.

ANYTHING you want in the Implement and Machine line, you can certainly get from NORRIS, if it is to be had at all, and at the right prices—so you need not be wondering if he *keeps this, that* or the *other* thing. Just send your order—it matters not whose make the article may be—if it can be had in Baltimore, and *he* is satisfied that *you are* "all sound on the *pay* question," you'll get the Machine, from an Apple Peeler up to that *great, grand* WESTINGHOUSE THRESHER AND CLEANER. He is going to have something "mighty nice" next year in the way of a

REAPER AND SELF-RAKER.

Look out for *that* Machine before you buy. Now remember you can get anything you want, either of Implements, Machines or Seeds, (*provided* you pay or satisfy him you will pay,) from

THOMAS NORRIS,

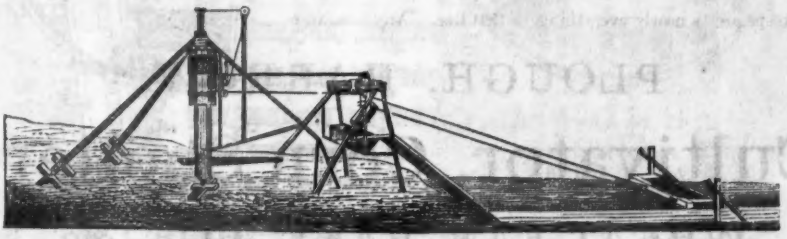
141 PRATT STREET, BALTIMORE, MD.

N. B.—NORRIS is Agent for

HERRING'S PATENT FIRE AND BURGLAR PROOF SAFE,

Which is conceded to be the best and most reliable Safe in the world. oct-tf

BRYAN'S AGRICULTURAL MARL AND MUD LIFTER,



A STRONG AND DURABLE MACHINE, WHICH CAN BE WORKED BY ORDINARY FARM HANDS.

THE PURPOSE OF THIS MACHINE IS

To Raise the Deposit from the bottom of Ravines, Coves, Creeks, Rivers, or other places inaccessible to Teams.

The machine works with facility 170 feet from the Capstan, and, if well attended, will remove a large cart load every five minutes on an average. For raising marl, a different bucket is made, having a strong steel lip and a steel coulter on each side of the bale, cutting its way free both going out and returning, and will lift any marl clear of rock, or into which a spade or shovel can be forced.

The Bucket is made of the best Boiler Iron, and is so constructed that it deposits its load into the hopper, through which it passes into the cart—the labor of shoveling not being required—and by a reversed motion of the Capstan is carried out for another load.

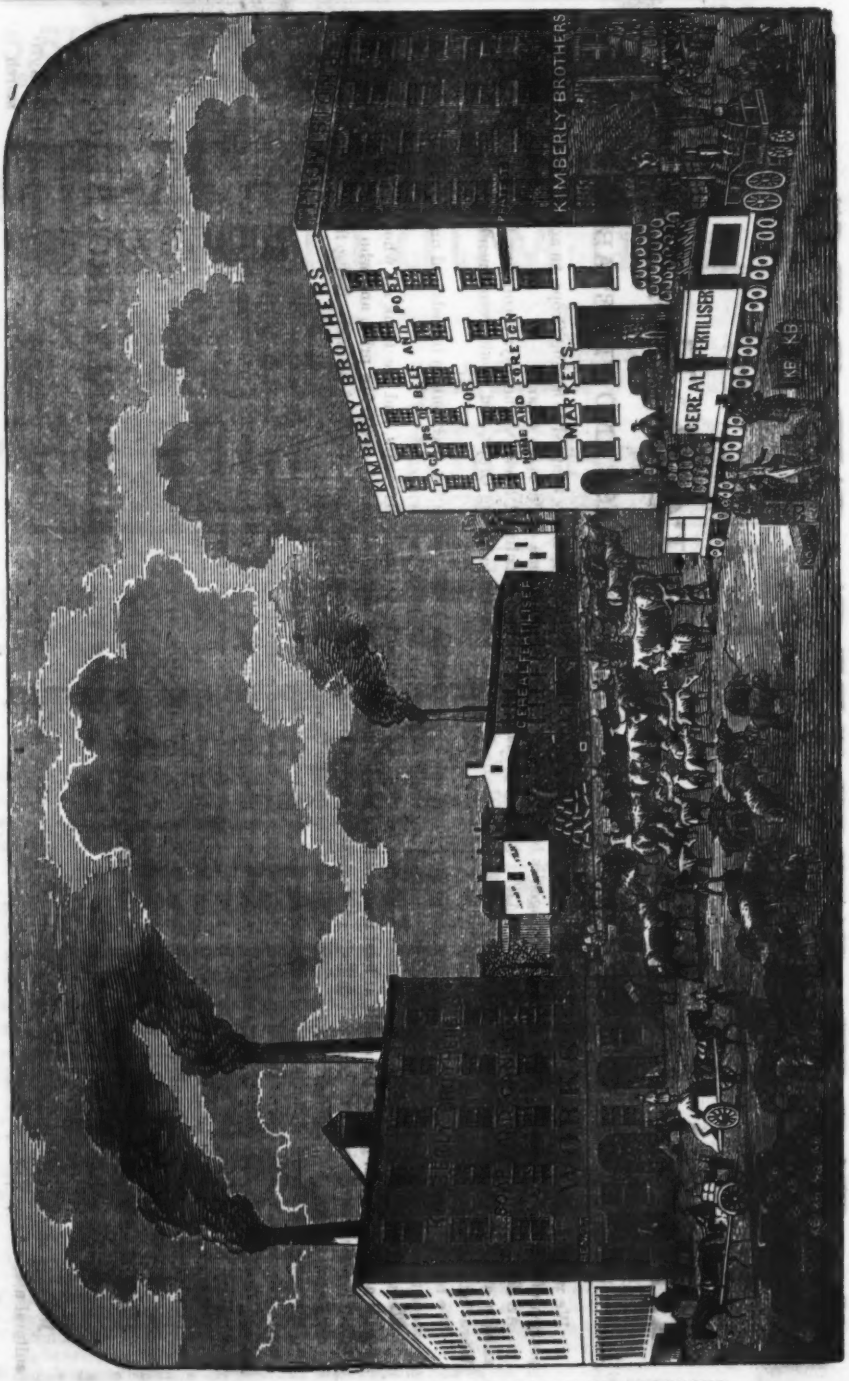
With the Drum—thirty-two inches in diameter and twelve feet lever—two horses are required to work it in mud. The Drum can be reduced in diameter to suit the consistency of the marl—but one man and a boy are required to operate it. By referring to a drawing, with clear explanation, sent with each machine, any ordinary carpenter can put one up without difficulty.

But a few pieces of roughly hewn timber are required for the frame. Every thing else complete, with chain and rope enough to send the bucket 170 feet from the capstan, is furnished in Baltimore for the sum of $225, cash.

All orders promptly attended to or information given at LARRABEE'S FOUNDRY *corner of Front and Plowman streets, Baltimore, Md.*

BRYAN & BROTHER.

october



KIMBERLY BROTHERS, MANUFACTURERS OF THE CEREAL FERTILIZER.

FOR SPRING CROPS.

KIMBERLY'S
Animal Compost or Cereal Fertilizer!

FOR CORN, OATS, WHEAT, RYE, TOBACCO, GRASS AND VEGETABLES.

We would call the attention of Farmers, Planters and Gardeners to our Compost, as particularly adapted to Spring Crops, on account of the large proportion of Nitrogen it contains, and because its Nitrogen is less volatile than Salts of Ammonia or Peruvian Guano.

AS RECOMMENDED BY DR. DAVID STEWART, Chemist of Maryland State Agricultural Society, who says it contains twice as much Nitrogen as Nitre and Ammonia. As the Nitre does not evaporate, consequently it is better adapted to Spring Crops, and would recommend it as a top-dressing to Wheat or Grass Lands at this season.

We have of the above valuable Fertilizer, prepared for Spring sales, about **1000** TONS, which has been put up in beds and undergone decomposition for more than two years, which makes it more valuable than anything we have yet offered to the Farmer.

We have now been engaged in the manufacture of the above Fertilizer extensively for nearly six years, and we think all who have purchased it and given it a fair trial, will give us the credit at least that we have given them a reliable article at an extremely low price, and who will not say it is a low price, when we assure them it is composed entirely of Vegetable Matter, Blood, Bones, Cracklings, Fish, Flesh of Animals, Refuse from Soap Kettles, such as old Bacon Grease, &c., together with No. 1 Peruvian and Phosphatic Guanos, to bring it to standard.

We assure the Farmer we have a standard for every pound we manufacture. The above being put up in beds of say 200 tons each, after being up for two years or longer is cut down, turned over, screened out, samples taken and sent to Dr. David Stewart for analysis, under whose instructions and under the eye of one of our firm every article is carefully weighed and manipulated to bring it to standard—therefore Farmers can rely on getting a pure article, and that at $20 per ton, worth as much, pound for pound, as Peruvian Guano, because it permanently benefits the land.

To poor and worn-out lands our Fertilizer is particularly adapted, having every element the plant requires. Farmers having that description of land will find it greatly to their advantage to give it a trial, the cost being trifling when compared with other Fertilizers in the market, while the results will compare with the best.

PRICE—$20 PER TON OF 2000 POUNDS—CASH.

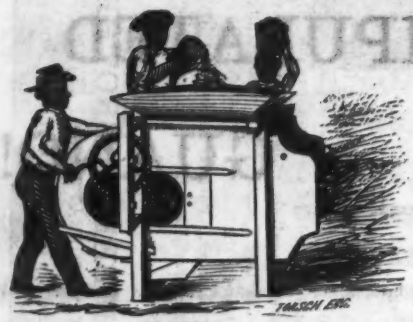
For sale by **KIMBERLY BROTHERS,**
CORNER OF PRATT AND PATTERSON STREETS.

We have on hand also, LEACHED ASHES, mixed with Liquor of Bones and Meat boiled in refuse Lye from Soap Kettles—a cheap article for Agricultural use. Also, REFUSE SALT.

march

AMERICAN FARMER—ADVERTISER.

5 SILVER MEDALS,
3 DIPLOMAS,
70 1st Premiums!



J. MONTGOMERY & BRO.,

155 NORTH HIGH STREET,

BALTIMORE, MD.,

Inventors and Manufacturers of their

DOUBLE SCREENED

ROCKAWAY GRAIN FAN,

Celebrated for their efficiency, durability and ease in working.

The undersigned, during the past year, as well as in those which have preceded it, had the fullest evidence of the superiority of their ROCKAWAY GRAIN FAN.

Wherever a test has been permitted, at any of the Cattle Shows at which their Fan has been exhibited, it has uniformly been triumphant—and the people of the South need not go North for the purchase of a Machine with which to cleanse their grain, for our Fan is unequalled, we believe, by any other ever introduced.

☞ The price of our Fans in Baltimore, is $34; and in Lynchburg, $36. Orders addressed to us at either place will receive prompt attention. A liberal discount to the trade.

The attention of RICE PLANTERS is called to our Fan, constructed for CLEANING RICE, which is the best for the purpose ever invented, and which costs $2 less than our Double Screened Rockaway Grain Fan.

mar

LADD, WEBSTER & CO'S

FAMILY AND MANUFACTURING

SEWING MACHINES,

No. 131 W. BALTIMORE STREET,

Between Calvert and South sts., Baltimore.

W. H. WALMSLEY, AGENT.

Let Manufacturers, Planters, Farmers, Housekeepers or any other persons in search of an instrument to execute *any kind of sewing now done by machinery, make sure they secure the best*, by examining ours before purchasing.

☞ SAMPLES OF WORK SENT BY MAIL. ☜

A FEW TESTIMONIALS IN FAVOR OF OUR MACHINES.

(*Extract from Letter.*)

LIBERTY TOWN, MD., July 2, 1859.

I am very much delighted with your Sewing Machine. It is just the right thing. Should I not be able to procure another, I would not take *ten times the cost* of it for it.

THOMAS CARR.

MOUNT PLEASANT, MD., NOV. 30, 1858.

MESSRS. LADD, WEBSTER & CO.—*Dear Sirs:* The Machine purchased from you in June last has been in constant use for tailoring purposes, and has stood every test to which it has been submitted, and gives entire satisfaction in every particular. The result of my experience is, that no sum, in reason, would induce me to part with it, if its place could not be filled with an exact counterpart I would most earnestly recommend all who want a really good Sewing Machine to examine yours before purchasing

JOHN W. OGBORN.

EASTVILLE, VA., May 10, 1859.

MESSRS. LADD, WEBSTER & CO.—*Gentlemen:* The Sewing Machine purchased for myself, and that for my friend arrived safely, and both are giving perfect satisfaction.

As regards the one being used in my own family, Mrs H. is so much pleased with it, that she says if she could not obtain another exactly like it, she would not take $1000 for it. Very truly, yours,

jan E. HOLLAND.

ROBINSON'S

MANIPULATED

GUANO!

ROBINSON'S MANIPULATED GUANO has been extensively used during the past year, and we have received letters from many Farmers and Planters, who speak in the highest terms in regard to its

VALUE AS A FERTILIZER.

We are fully prepared to supply all orders, and guarantee that the article we offer is not surpassed in quality by any fertilizer now in the market. Our Guano is composed of the

Best Peruvian Guano,

The Richest Phosphatic Guano,

And Finely Powdered Bone,

And we warrant every lot we sell to be

One-half Peruvian Guano,

We would be pleased to have Farmers visit our Works, that they may see and learn how the Guano is prepared.

☞ Certificates and Pamphlets, giving all needed information, will be furnished at our Counting room, and by our Agents.

F. ROBINSON & CO.,

No. 4 Hollingsworth street,

feb BALTIMORE, MD.

HIGHTSTOWN

(NEW JERSEY)

NURSERIES.

200,000 PEACH TREES,

FRUIT TREES IN POTS.

I beg leave to call the attention of my friends to a very large assortment of Peach, and other Fruit and Ornamental Trees, Grape Vines, Strawberries, &c.

Catalogues will be ready for distribution by the middle of August, and will be forwarded on application.

I am prepared to furnish gentlemen who have Orchard Houses with

PEACH, NECTARINE & APRICOT TREES in Pots,

READY FOR BEARING.

All who favor me with orders, may be assured that they shall receive none but well trained trees and of the best varieties. Address,

ISAAC PULLEN, Hightstown,

aug. 3 mos. NEW JERSEY.

PERUVIAN GUANO.

Having completed our arrangements with the AGENTS of the Peruvian government for our usual

SUPPLY OF PERUVIAN GUANO,

We respectfully inform Farmers and Dealers that we are now prepared to supply their orders for any quantity.

Our long experience and established reputation in this trade is, we trust, a sufficient guarantee that purchasers may rely upon obtaining the

GENUINE UNADULTERATED ARTICLE,

Delivered direct from the Agents' Warehouses.

We have also for sale—

Ichaboe, California, Baker's Island and AA Mexican Guano, of superior quality.

MARYLAND CO'S SUPER PHOSPHATE OF LIME, and

TREGO'S PLANT FOOD AND RUST PREVENTIVE BONE DUST.

P. MALCOM & CO.

aug—3 mos. WOOD STREET, BOWLY'S WHARF.